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The Journal of The Medical Association of Georgia

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Volume XVII

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The Journal of Chemotherapy for October. (Volume V, No. 3) contains an interesting article on "The Chemotherapy and Biologic Therapy of Malignant Tumors" by Dr. John A. Kolmer. There are, also, articles on "The Chemotherapy of Protozoan Infections Other Than Syphilis", "Syphilitic Therapy", and "Liver Treatment in Secondary Anemia", also, "New Views on Chemotherapy of Cancer", editorials, abstracts, and therapeutic news.

This quarterly journal will be sent gratis to physicians interested in chemotherapy, research and the treatment of syphilis. For copies address the Dermatological Research Laboratories, 1720 Lombard Street, Philadelphia, or the Abbott Laboratories, North Chicago, Ill.

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ETIOLOGY OF URINARY INFECTIONS IN THE MALE AND METHODS OF DETERMINATION*

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It is my wish in presenting this paper to call attention to certain important points concerning the etiology of urinary infections in the male, and to briefly outline the methods by which the sources of these infections are determined. If a systematic outline is followed in the examination, with the instruments of precision which we have at our command, one can assert, with a fair degree of assurance, that it is possible to determine the sources of any infection in the genito-urinary tract.

The determining factors in the etiology of these infections are: (1) the type of infection; (2) the manner in which it invades the urinary tract; (3) the source; (4) the condition of the tract which predisposed it to infection.

BACTERIOLOGY

In reviewing the literature on the bacteriology of urinary infections, it is interesting to note the almost uniform conclusions as to the relative frequency of various invading organisms in the different parts of the genito-urinary tract. The staphylococcus and streptococcus predominate in infections of the kidney cortex and perinephritic tissue; the colon bacillus group is accredited with being the offender in about 90% of the infections of the kidney pelvis and adjacent parenchyma.

The etiology of infections in the bladder is about equally divided between the colon group and pyogenic cocci. Staphylococci which oc-

curs much more frequently than the streptococci, are usually benign, whereas the virulence of the other bacteria is variable. The gonococcus is the most common urethral infection. The colon bacillus is usually the secondary invader in cases of chronic gonorrhea. Other less frequent infections that are sometimes seen are the typhoid bacillus, tubercle bacillus and the micrococcus catarrhalis.

These infections may spread from one region of the urinary tract to the other either by the lymphatics, through the blood, or by direct extension. However, a knowledge of the fact that certain organisms have a predilection for a special portal of entry is a help in determining the location of the primary lesion, even if the lower lesion of a descending infection is discovered before the upper. For instance, gonorrhea enters through the urethra; tuberculosis of the bladder usually secondary to tuberculosis of the kidney, etc.

According to Young, "infections may reach the urinary tract through the blood stream, from foci elsewhere in the body, or, directly from the outside, by introduction through the natural channels, by extension of ulceration from neighboring organs, or by a traumatic opening, as a surgical incision or wound." The vast majority of renal infections, however, are hematogenous in origin, that is, the organisms are supplied from the blood stream, and it is this mode of invasion that I wish to stress. Cases of pyelo-nephritis are seen in whom very evident foci are found elsewhere in the body, such as infected teeth, tonsillitis, sinus infection, carbuncles, stasis in the intestinal tract, etc. The recovery of the same organism from the urinary tract and distant focus is not always possible, but the removal of the distant focus influences the urinary infection in a sufficient number of cases to warrant the suspicion of a very close connection.

*Read before the Medical Association of Georgia, Athens, Ga., May 12, 1927.

PREDISPOSING FACTORS

Like infections elsewhere in the body there are certain conditions which predispose the genito-urinary tract to infection. These factors are, as a rule, necessary before damage is produced. For instance, it is generally recognized, that during the course of acute and chronic diseases, the kidneys may eliminate bacteria without any appreciable detriment to themselves. If on the other hand, the resistance has been lowered by previous injury or disease, or if there is some interference with free drainage, they are likely to become the seat of a severe infection, although the primary one is slight. Any abnormalities of the kidneys and ureters, as well as obstructions produced by calculi, tumors, stricture of ureter, enlarged prostate, etc., may be accessory factors in renal infections by interfering with free drainage.

Enlargement of the prostate, causing obstruction to urination is by far the most important factor in primary bladder infections among men. The obstruction may be due to acute or chronic inflammation as well as to a true hypertrophy. Contracture of the vesical neck, a condition not generally recognized, likewise leads to an infection of the bladder. Urethral stricture often has associated with it an infected bladder. Spinal cord lesions and other conditions which interfere with the nerve and blood supply are a potential source of infection. Diverticulæ may produce an infection, either intermittent or constant.

The anatomical location of the prostate and seminal vesicles predispose them to frequent infection. They are involved to some extent in practically all posterior urethral infections.

The peculiar anatomy of the urethra, with its numerous Littre glands and lacunæ of Morgagni allow the growth and persistence of organisms that have been implanted there. Stricture or any thickening along the canal, or even a narrow meatus will many times keep up an infection. It is with a thorough knowledge of these facts that one can intelligently go about the examination of the genito-urinary tract.

UROLOGICAL EXAMINATION

The natural procedure in investigating the lower genito-urinary tract in the male is to begin at the meatus. A microscopical exam-

ination is made of any discharge. The patient then voids his urine in three glasses (noting the force of the stream) and a careful microscopical examination is made of any pathological elements found. Should he have an acute urethral infection, further investigation may not be necessary nor wise at this time. If it is thought advisable to investigate further, and the prostate and seminal vesicles are suspected as a source of infection, he assumes a knee-elbow position on a flat table, and these organs, if not acutely inflamed, are examined and emptied by massage. This secretion so obtained is collected in a fourth glass by having him void or it is drawn by catheter. A microscopical examination is made.

Should the infection be chronic and in the lower tract, the calibre of the urethra should be determined with a bougie à boule for strictures or evidence of thickening along the canal. From this, tentative conclusions can be drawn regarding the lower tract, recognizing, of course, that these conclusions are merely important hints.

A more accurate and detailed test sometimes becomes necessary, particularly in long standing cases in determining the exact location of the infection. This can be done by irrigating the anterior urethra, and if necessary, the posterior urethra, with a weak hychlorite solution through a gum-linen catheter, bearing in mind the anatomical dividing lines between the anterior urethra, posterior urethra, and bladder. It is possible to cleanse thoroughly one portion without disturbing the other, and if properly performed, one can reach a clear conclusion regarding the lower tract. Considerable help too, is afforded by the cystourethroscope in determining the source of chronic infections along the urethra.

A scientific investigation can be made of the bladder with the cystoscope, determining the amount of prostatic obstruction; whether or not there are tumors, calculi, diverticula or any inherent condition that might be the etiological factor in producing the infection. Cystograms should be done on many of these cases depending upon the circumstances.

The accurate methods of diagnosis of kidney and ureteral conditions which have been attained at the present time are due to the

X-ray, cystoscope, the ureteral and wax-tipped catheter, shadowgraph catheter, pyeloureterography, and the functional kidney tests. A catheter (opaque) is passed up the ureter on the suspected side, or both sides noting any resistance to the passage. In suspected stricture or calculus cases a wax-bulb catheter is used. It is brought down slowly in a spiral motion and examined with the lens for scratch marks. This is of particular value in diagnosing the smaller stones in the ureter which are sometimes missed with the X-ray.

Specimens of urine are collected through the catheters for microscopic examination, specific gravity test, etc. If pain is present an endeavor is made to reproduce it by injecting normal saline through the catheter. The function of each kidney is determined with phenolsulphonephthalein. An X-ray is taken and this is followed by a pyelo-ureterogram on the suspected side, or both, but never on both sides at the same time. This latter named procedure has done more toward determining the predisposing factors of renal and ureteral infection than any thing else.

CONCLUSIONS

(1) A systemic outline should be followed in all cases. An extensive examination is not always necessary, but in obscure conditions one should not hesitate to use every available means in investigating the urological tract from the external urethral orifice to the cortex of the kidney. A few pus cells, even in very small microscopical amount, is of significance, and a very careful examination should be made to determine their source.

(2) The likely association between urinary infections and infections elsewhere in the body should always be borne in mind.

(3) An endeavor should be made to determine if there is some mechanical obstruction present, for this is the most common etiological factor in upper urinary tract infection.

DISCUSSION ON PAPER OF DR. FLOYD

Dr. W. F. Reavis, Waycross: I have listened to Dr. Floyd's paper with quite a bit of pleasure. I do not think I can add very much to what the doctor has said in regard to the etiology of kidney or urinary infections. He has covered the field well. In the methods of determining these conditions I think you will find that a careful history

taken of these patients will give you a lead to begin work and will save the patient and yourself quite a bit of time and trouble. Practically all of these cases have a story to tell when they come to you or when they are referred to you or when you see them. The trouble is manifested in different ways. Their general condition will also give you a lead in regard to the trouble. Systematic survey of the whole tract, as the doctor has outlined, is the only method of determination. It certainly is the proper method of this work. The method of procedure in the beginning should be from the meatus going inward and upward. It protects the patient. If you have an infection of the lower urinary tract it would certainly be a grave procedure to start hunting in the kidney because if you did not have an involvement of the kidney by the time you got through you would have. That is the procedure which does the patient a great amount of good and makes him feel better later.

The work that has been done in recent years in establishing different methods of examination has certainly rendered a great service to the man who has been suffering for years and years. Those of you who have seen the conditions that are presenting at the present time in men sixty, seventy and seventy-five years of age who are leading catheter lives, can certainly appreciate the fact that the work that can be done today with our present day methods should certainly relieve that condition in the future. I think if the method that Dr. Floyd has outlined is thoroughly carried out that in the future we will not have these old men in the condition we find them today.

Men who are doing urological work of any type to begin with should be very gentle in their examination. The urethra of the male is a part of the anatomy that can be injured very easily by rough handling and instrumentation. Now the mere fact of passing an instrument is a science in itself. Some men are good and they know their work, but in examining their patients they go about it in such a fashion that the examination will produce more harm to the patient than the disease he has. Gentle passage of the instruments following the correct outline of the urethra will render service to the man.

Dr. R. M. Harbin, Rome: I am not competent to discuss this subject from the standpoint of urology but this paper raises a very important practical question to my mind not only in urology but surgery and obstetrics as well as medicine. I will not attempt to discuss the urological phase as the doctor brought out but only one phase, which for the lack of a better name I will call residual urine cystitis. I believe that is one of the most common evils that we have to contend with that is not

recognized. Dr. Floyd has pointed out one question that conforms to the universal law, namely, stagnation and infection go hand in hand. That is true of every department of our physiology. Some eight or ten years ago I had a little article that brought out that one point with some practical examples and ever since we have made it a rule to have in mind that residual urine is possible in all classes of cases. From the standpoint of general surgery, I do not believe that we have had a post-operative cystitis in years. I believe it is just for that reason we are so easily caught in the snare, because it is indicated on the chart that the patient is voiding urine regularly in sufficient quantities, being an overflow passage. There is no way to check against that except to use a catheter.

Another point that I have seen repeatedly among the internes, the younger graduates who are well trained, is that they have been taught not to catheterize until absolutely necessary because of the danger of producing an infection. I do not believe there is a greater fallacy ever taught because if you can keep the bladder empty even with clumsy technique, it is very rare to my mind that you will have an infection. In any case of doubt if the bladder is not functioning properly catheterize for diagnostic purposes. That may seem rather unorthodox.

Dr. W. A. Upchurch, Atlanta: I think one of the important points that Dr. Floyd emphasized was the importance of a urologic study where you have urinary infection to try if possible to determine just where this infection is located. It has been a rule among the average physicians in my experience to simply give such patients an alkali or some form of urotropin and let it go at that. We do not know where this infection is located unless we make an effort to find out just where it is.

One of the points Dr. Floyd did not bring out very strongly is the three-glass urine test. If the first glass contains considerably more pus than the third glass, the infection is located in the lower urinary tract. On the other hand, if in the three-glass test all three glasses contain approximately the same amount of pus, then as a rule you will find the pus in the upper urinary tract or in the prostate or seminal vesicles where it is backing up into the bladder.

I have in mind one particular patient who had a pure culture of typhoid bacillus. This man had typhoid fever some five months previous and from that time on had considerable amounts of pus in the urine. He had alternated between urotropin and alkalies for that five months without any success. His doctor tried to locate just where the infection was

coming from but without success, so he referred him to us for urologic study to determine whether he had pyelitis. We made a three-glass test and the third glass had as much pus as the first glass. The lower urinary tract on examination showed no infection but on cystoscopic examination, catheterization of the ureters and a complete phthalein test, we obtained purulent urine from the right kidney and clear from the left. A culture of the right urine showed a pure culture of typhoid bacillus. We still have the man under treatment. His kidney has cleared up and the urine shows almost no pus but the last culture we made still showed typhoid bacillus. This case shows the necessity for urologic study where there is pus in the urine.

Dr. Earl Floyd, Atlanta (closing the discussion): I would like to say a few words regarding the three-glass test which I mentioned and which Dr. Upchurch brought out more in detail possibly. There is one condition in which the specimen of urine from the bladder may be clear on one examination or on repeated examinations and yet the patient may have an infection of one of the kidneys. The ureter may become blocked due to a stone, blood clot, etc., and the urine not drain temporarily from that side. Pain which is always present in the beginning may not be present later on, because the back pressure over a period of time may temporarily or permanently impair the kidney function and the other kidney take over the work. This may fool one if he is not careful in relying on the third glass too much. The urine may be clear and the patient have a ureteral block.

RADIO WAVES

"The Medical Association of Georgia helps you more than you help it—think it over."—Mulherin.

"Add to your knowledge, sympathy."—Fullilove.

"Let your ethics be the Golden Rule."—Thompson.

"Seek wisdom that your counsel may be effective."—Clark.

"Love, loyalty, and tolerance are the three greatest words in the life of the physician."—Bunee.

"United effort and a progressive spirit will bring success."—Myers.

"Active membership in Medical organizations is a prerequisite to success; devotion to duty assures it."—Sharp.

"Broadcast sunshine across your tomorrow's encouraging others to pull with us."—Moore.

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INCREASING THE USEFULNESS OF THE WASSERMANN TEST*

PAUL EATON, M.D. AND F. L. DAMPEN, B.S.
Augusta

In the twenty-one years which have elapsed since its introduction the Wassermann test has been so widely advertised and so much used that no effort need be made to extend its use. Wassermann is a household word. Clinie patients with four plus reactions hold in scorn those with three, two or less. A story is told of a negro woman who said to her physician, "How come me to be all right, when mah husban's blood is all plussed up?"

But, there is much room for increasing the usefulness of the Wassermann test by the wider dissemination of information concerning its true import. It is such a delicate test and requires such a formidable array of apparatus that it can never come into the hands of the general practitioner. This same practitioner must, nevertheless, depend upon the results given by it and probably with increasing frequency in the future. It is, therefore, necessary that he understand the basis of the test, and its idiosyncrasies.

The Wassermann test is not a test for syphilis. It is performed with reagents which, so far as we know, have nothing at all to do with syphilis, but by some odd chance, these reagents behave in the large majority of cases as though they were specific. There is a small percentage of error and this must be taken into account by every physician who uses the test.

It is unfortunately true that the test is sometimes definitely positive with samples of blood taken from persons who are not suffering from syphilis. In some of these cases the substance which causes the test to be positive is of a transient nature, disappearing after a greater or less time. Inasmuch as we do not know what causes a positive test when there is syphilis we are entirely in the dark as to the reason for a positive test when there is no syphilis. Fortunately, these non-specific results are comparatively rare. We should nevertheless be constantly on our guard against them.

It may be well here to repeat what has been said so many times before, that the laboratory does not make a diagnosis. It merely reports certain findings which may or may not assist the physician in making up his mind as to certain conditions. In the case of syphilis the physician must make up his mind to what extent he will be guided by laboratory findings, knowing that in an uncertain proportion of cases that are definitely non-specific, the laboratory will return a positive finding.

It is, indeed, fortunate that the error which has just been mentioned is of very infrequent occurrence compared with the error in the opposite direction. We hear frequent criticism of the test because it has given a negative result in cases that are definitely syphilitic. We know why this happens in certain cases at least. In another paper we are reporting the results of some investigations concerning the occurrence in human blood of a substance specific for the hemolysis of sheep red blood cells. When this substance occurs in any great amount it is very apt to cause a false negative result. Fortunately it is easy to find out if this is the cause of a negative result which is under suspicion of being false.

If physicians are thoroughly aware of this weakness of the test they will be less likely to be scornfully critical of the test when its results do not square with the clinical findings. Also they will be in less danger of having their judgment swayed by a faulty test. I can imagine that a physician might have a faulty thermometer which would indicate a normal temperature in the case of a patient suffering from a high fever, but I can not imagine his allowing his judgment to be so far in error as to be deceived against the evidence of his other senses.

Medical men must learn that the Wassermann test may fail. Indeed that it will fail in a certain or rather in an uncertain number of cases, and that when there occurs a discrepancy between the test and the clinical findings it is the test that must be held under suspicion.

Within the past few years there has been introduced by Kahn of Michigan, a precipitation test for syphilis. Results obtained by the use of this new test check very closely with those given by the Wassermann test. But the test is subject in a certain degree to errors

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and limitations which, if not exactly the same as in the case of the Wassermann, at least are of the same order. It has been found, however, that these errors do not necessarily occur in the same cases.

It is, therefore, desirable to have both of these tests performed on the same sample of blood whenever it is at all possible to do so. If one fails there is at least a chance that the other will not.

As an example of the benefit accruing from such a course I may cite the results obtained in a recent series of 2275 tests comprising a little more than half of the work of our laboratory so far this year. In 67 of these cases the blood serum was anticomplementary, which means that so far as the Wassermann test is concerned, it was useless. We were able to check 53 of these cases with the Kahn test and found that it was positive in 40 and negative in 13 of them. The 14 which we did not test amount to only one-half of one per cent and you know that that amount is harmless.

There are then at the present time two methods by which the usefulness of the Wassermann reaction may be increased. The first is, to make an Irish bull out of it, by using the Kahn test to reinforce the Wassermann. The second is by explaining to the profession as thoroughly as possible the weaknesses of the test.

The following points must be constantly borne in mind.

First, that the test, while enormously valuable, is not infallible.

Second, that the responsibility for diagnosis falls, not on the laboratory, but on the physician.

The physician must use the Wassermann test just as he would use a watch or a thermometer, with a full appreciation of its weaknesses and shortcomings.

In the original diagnosis of syphilis a weak or doubtful Wassermann reaction is of very little value. But in syphilis under treatment a weak or doubtful reaction may be of the very greatest value in determining the efficacy of treatment.

Within the limits of error that have been mentioned a strong positive is of very great diagnostic import. If treatment has been instituted very early, say for example on the

basis of a positive dark-field examination it is highly probable that the Wassermann reaction will never be strong and, indeed, it may never be positive at all. In such cases the laboratory can offer no aid. The physician must be on his guard against leaving off treatment too soon under such conditions. Here again he must rely on his unaided clinical judgment, and on the results of the experience of those who treated syphilis in the days in which the treponema was as yet undiscovered and in which there was no aid to be sought from the laboratory.

DISCUSSION ON PAPER OF DRS. EATON AND DAMREN

Dr. Lee Howard, Savannah: As laboratory men, I do not feel that we have an apology to offer for the Wassermann test. Dr. Eaton has given us a very pleasing and practical sort of paper, and brought out points that we have to keep in mind at all times and that can not be stressed too much. I am glad that he stressed the point that failures in the Wassermann test are a small percentage. There is no test that is perfect and I believe that the Wassermann test is as near perfect as any clinical laboratory test we have. We cannot eliminate all errors from any procedure. The personal element has to be considered as well as the technical liability to error. The test has its natural limitations that we have not yet been able to absolutely overcome, as Dr. Eaton has brought out.

It is unfortunate in a way that the test is reported some times without qualification. I do not know how generally that is done but I think certainly in the past it has been misleading. Any test less than four plus should be qualified. As a rule we know nothing of the clinical side of the question. We get the blood and report what we find. If it is a four plus we should report it as positive. If it is less than four plus, then it should be read as doubtful or a weak positive. Anything less than complete fixation, three plus or less, it has been my practice to report as suggestive. All reports have to be correlated with the clinical side of the case. Cases in which the laboratory makes a complete failure, a positive report that should be negative, or a negative that should be positive, are few. Of course this does happen and it is rather unfortunate, but it is something that we can not absolutely overcome. Some years ago I read a paper along this same line in Augusta and received some criticism. I was detailing some changes in technic which I thought were improvements. Some thought that the original Wassermann test was the thing to use.

Since that time there have been tremendous changes especially in trying to promote a more uniform technic as a result. I believe the test is being done in a more uniform way throughout the state and country than ever before. That is a tremendous advantage. The test I am familiar with is practically the Kolmer technic with some modifications. Each laboratory has its own variations. I believe the personal element is quite as important as anything else. With a technic in continuous usage by the same person, the percentage of error is less. Co-ordination with the clinical findings is the thing that really proves the value of the test.

I have enjoyed Dr. Eaton's very interesting paper. He has covered the field which I regard as most important in connection with this major test.

Dr. J. C. Metts, Augusta: Dr. Eaton has defined for us very clearly the definition of the complement fixation test as applied to the diagnosis of syphilis. Any diagnostic test which is to be carried out by the busy practitioner must be short, easy of performance, and fool proof. Unfortunately the Wassermann test has none of these qualities, and for its performance we must rely upon the trained laboratory technician. To derive the utmost benefit from it the practitioner must be familiar with its value as well as its shortcomings, and this Dr. Eaton has outlined for us in a manner that calls for no further explanation. The Kahn test, we think, has a double value. In the first place, it goes to give a more reliable test for syphilis, but far more than that, it goes a long ways toward removing the Wassermann test from the realms of the fantastic and placing it on a purely physical basis of colloidal chemistry.

Dr. Eaton in his modesty has assumed for the laboratory the brunt of the blame when things go wrong. Some of us are not so peaceably inclined and feel that if the clinician would put only half the time on his physical examination that the serologist does on this complicated test that there would be a much greater percentage of agreement between the clinical and laboratory findings. A great deal of the trouble probably arises from the physician demanding from the laboratory information of a type which no laboratory is in a position to give.

Both Doctor Eaton and Mr. Damren are to be congratulated on a beautiful piece of research work which they are doing and from which we hope to hear from in the near future. Only those of us who are familiar with the vast amount of work which their laboratories are called upon to do can appreciate how much they have done to increase the use-

fulness of the Wassermann test.

Dr. Paul Eaton, Augusta (closing the discussion): It is certainly very refreshing to listen to an honest and frank discussion. It does not often happen. The real point of this paper I hoped to approach indirectly and that is this; the greatest mistake that the profession has made in the use of Wassermann test is the mistake of telling the patient what the result is. The profession has learned by long experience that it is not always wise to take the patient into full confidence. Those of you who have treated cases of typhoid fever know that it is not safe to tell the patient what the morning temperature is because it is lower than the evening temperature. You do not have to tell him exactly the truth. You know how to get around that, but if he knows the morning temperature is low and the evening temperature is high, he is not in position to view that from a rational standpoint and he is discouraged. Many a patient has been injured by knowing what the result of the Wassermann test was. The physician knows the weaknesses of the test and the patient can not know them. The real point is, do not take the patient into your confidence regarding the Wassermann test. If the test is positive in a non-specific case you have done him a great injury. If the test happens to be negative and from the clinical findings should be positive, you have done this patient an equally great injury.

RADIO WAVES

(Continued from page 4)

"Practicing charity, patience and cheer,
To make 1928 a Banner Year."—Roberts.

"Genius is crystalized energy from properly directed brain cell activities."—Thrash.

"Medical ethics is plain, honest, true, common sense."—Head.

"Medical organization develops efficiency, loyalty, confidence and self respect."—McCord.

"Since Scientific Medicine has prolonged the life of man, organized medicine should destroy the life of the quack."—Brown.

"Medical organization helps to solve professional problems and promotes mutual respect and good will."—Ayers.

"Know your colleagues better—you will like them."—Lewis.

"High aims are accomplished by self denial, strength of desire, singleness of purpose. Shall we strive on?"—Coleman.

"Your mission is not only medication but education."—Wall.

"Patronize our advertisers."—Rowe.

OTOMYCOSIS*

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Study of fungi and disease conditions produced by them has appealed to us in this section very little, as fungi and the tropics, are associated in our minds. We must remember that in any section where there is warmth and moisture we may have growth of these human parasites and the conditions produced by them.

The fungi are saprophytic and bear the same relation to man as does mistletoe to the oak. They invade the lungs, all exposed mucous membranes, and the skin.

Our attention was called particularly to this condition as it affected the external auditory canal and drum membrane of a very large number of people presenting themselves for treatment in south Florida, particularly during the six weeks following the hurricane of Sept. 17 and 18, 1926. It was not unusual to see three or four new cases per day.

The particular phase of this subject we wish to discuss, is that concerning the invasion of the external auditory canal. It is true that descriptions of otomycosis in most text books leave much to be desired. A few sentences or paragraphs deal sparingly with a subject worthy of much detail, a knowledge of which would help both physician and patient. For this reason, much of what I present is gathered from experience during the last quarter of 1926, although a few cases were studied early during that year, and two cases since my return to Georgia.

The assistance of the Florida State Board of Health and of Dr. Leadingham of Atlanta, is recognized and to them I express my appreciation.

Detailed reports on cases are impossible, as my records prior to Sept. 17, 1926, were destroyed and the demoralized condition of affairs following that date made it impossible for us to use the laboratory. A few cases came under my observation since 1916, but the prevalence in south Florida impressed on me the necessity for further study.

The most common forms of fungi with which we came in contact, were of the species *Aspergillus niger* and *fumigatus*. These were identified by the detritus in the ears and by the growths and smears confirmed by the laboratory study above mentioned.

ETIOLOGY

The development of the spores in the external auditory canal is rapid, as there is warmth and moisture, and, furthermore, they are protected from every mechanical interference. The growth is augmented or stimulated quite often by the instillation of oil, so often used to soothe discomfort in the ears. As stated, warm climates offer every requirement, and occupations such as in yeast factories and workers in cellars, are prone to invasion. One author stated eczema of the moist variety was conducive to fungus invasion, and one describes it under the head of foreign bodies in the ear.

During the period following the hurricane all of us lived in water-logged houses, wore damp clothes, and slept on damp mattresses for ten days. The etiological factors here, were the conditions described plus the presence of spores of *Aspergillus niger* and *fumigatus*.

Of these cases treated, all were middle aged, and a majority of them women. A few had chronic discharging ears. Symptoms varied, depending on whether the growth was superficial or invaded the deeper structures, and whether treatment was applied. Where the superficial structures alone were involved, except on the drum membrane, we had no symptoms and when mild and affecting the membrana tympani, only slight impairment of hearing. When the deeper tissues were involved, we had itching pains, varying in degree, tinnitus, deafness, and swelling-pain, often radiating to the neck. These symptoms were from mechanical irritation and from toxins produced.

Examination revealed many black or greenish spots, covering the canal. On removal of the detritus, we found large threads of considerable thickness, black or greenish in appearance. The membrane often came off "en masse," leaving a red velvety exposed area.

The course of the disease depends on the amount of the growth, and whether appro-

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priate treatment is begun early or late. If not properly treated, it runs an indefinite course, and is prone to frequent recurrences. The patient often returns complaining of pain and deafness, when examination will reveal complete blocking of the canal, with debris made up of fungus membranes. Immediately on removal of which there is relief of pain and tinnitus. If no treatment is instituted, we find membrane returning in a day or two. Occasionally, fungi are cast off spontaneously.

The diagnosis is easy if one is looking for fungus invasion and it is to be differentiated from seborrheic dermatitis and eczema. Also, we must remember that coal dust is often mixed with cerumen, and we might confuse this with fungus. If in doubt, microscopic examination will definitely settle the matter.

The prognosis is always favorable, even though the drum membrane has been penetrated, provided one has an appropriate treatment and seeks a dry climate.

TREATMENT

Freezing the surface with ethyl chloride, or the instillation of ether, after the removal of the membrane, would be ideal but the pain is too severe. We, therefore, have found that rational treatment, which takes in consideration the essentials necessary to the growth of the parasite, heat and moisture, gave good results.

First—The ear should be thoroughly irrigated with warm water, thereby removing a large part of the growth and detritus.

Second—Instill peroxide of hydrogen and allow this to remain in the ear for a few moments.

Third—Irrigate the ear with warm water.

Fourth—Instill 10% cocaine in 1-1, 1000 solution of adrenalin chlorid. Allow this to remain ten minutes. Dry the ear and instill about ten drops of pure alcohol. This should be repeated every day for a period of at least one week, and then at intervals of one week for a month or more. Under this treatment, our patients were relieved, and where they persisted in treatment, relapses were rare. After the first two or three treatments, all medications except alcohol, can be omitted.

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SYNONYMS

Mycosis of the External Auditory Meatus.
Parasitic Inflammation of the External Auditory Canal.
Myringomycosis Aspergillina.
Myringomycosis.
Aspergillomycosis.

REFERENCES

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DISCUSSION ON PAPER OF DR. FORT

Dr. L. C. Rouglin, Atlanta: We are, indeed, indebted to Dr. Fort for calling our attention to a condition which is not as rare and uncommon as we are supposed to believe. It is a condition that is not so often recognized because mainly we are not looking for it. Otomyeosis or fungus infection of the ear, if you are looking for it, you will find more often than you suppose. The fact that seborrheic dermatitis resembles it and that the detritus occurring in the external canal will call our attention to some symptoms of other diseases, we overlook this rather not uncommon condition.

One point that Dr. Fort called attention to in his paper and yet did not lay sufficient emphasis on, is the common custom of putting sweet oil or other oils in the ear whenever one has an earache. This sweet oil or any other oil is a very popular substance for the treatment of this trouble and we are increasing the trouble instead of helping it. The treatment as Dr. Fort has outlined it is certainly a good one because it is thorough. What is best of all, it is specific and curative. There is only one thing I might suggest and that is the use of five grains of salicylic acid in alcohol. I found in the few cases I have recognized that it has helped me a great deal and possibly prevented a recurrence of the condition. If you do not entirely get rid of the parasite, and the fungus is a true parasite that propagates rapidly, you will find your cases recurring inside of a few weeks. After cleaning out the ear, as Dr. Fort suggests, with the use of alcohol and occasionally I use a little mercurochrome, I give my patient five or ten grains of salicylic acid in alcohol and tell them to put one or two drops in the ear for some time. They stand it very readily. The alcohol gives a little burn but they bear it nicely. You can find by so doing you can eradicate the trouble entirely which we must do before the patient

is cured. I think we are indebted to Dr. Fort for calling our attention to a rather common condition which was not readily recognized before.

Dr. J. C. McDougall, Atlanta: It is an ill wind that does not blow some one good, because Dr. Fort has brought us good tidings from that Florida hurricane by investigating and studying the fungus causing otomycosis. It is a rare condition and we see and hear of it very seldom, which shows we should always be on the lookout. This impresses us of the great value of making smears of the discharges from the external auditory canal. There are so many cases of chronic suppurative otitis media that have never been carefully examined. One of my professors, Dr. Whiting of New York City, always taught his students that a chronic discharging ear was the most dangerous ailment a patient could have in ear disease. The necrosis may go on to a brain abscess and other complications. It is a mistake to tell the mothers to let the child grow out of it.

A peculiarly shaped auditory canal with little air and sunshine in the canal makes it a very favorable site for fungi and bacteria to multiply. I have often found diphtheritic bacilli and in one case found Vincent's Angina in the external auditory canal.

The treatment as outlined by Dr. Fort and the addition by Dr. Rouglin of salicylic acid is very good. I do not think Dr. Rouglin put in enough to do any good. He ought to fill up the canal. I think the ultraviolet ray would be advantageous in these cases which Dr. Fort says need plenty of sunshine, light and air.

This is certainly a good paper of Dr. Fort's and I am sure we are glad to have this rare fungus brought to our attention.

Dr. Harvey Cabaniss, Athens: I do not believe I can add anything to what Dr. Fort has said. My treatment has been practically the same as his. I usually irrigate the canal with a weak solution of lysol, dry it thoroughly, and then fill the canal with a saturated solution of boric acid in alcohol.

The irrigation removes all debris, thus allowing the alcohol solution to come into contact with the entire surface of the canal. Occasionally, I have swabbed the canal with an ointment although this is contrary to the belief of those who think the condition occurs more frequently in patients who have used oil in the ear.

I think Dr. Fort's paper very timely as these cases cause quite a good deal of discomfort and annoyance to the patient suffering from this type of infection. The disease usually clears up promptly when properly treated.

REVIEW OF RECENT LITERATURE ON INJECTION OF INTERNAL HEMORRHOIDS*

WITH ANALYSIS OF FIFTY OF THE WRITER'S
RECENT CASES

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The treatment of internal hemorrhoids by the injection methods has now become one of the recognized forms of treatment. It is generally used by proctologists and many surgeons, and during the last five years both the method of treatment and the solutions have become more or less standardized.

According to Collier F. Martin, a man named Mitchell, of Clinton, Illinois, originated the injection treatment in 1871, using a solution of carbolic acid of about 33 1-2 per cent. A. L. Sherman gives credit to the same man, Mitchell, but places the date about 1877. Morley claims that this method of treating hemorrhoids was first brought to the attention of the surgeons of England by Swinford Edwards in 1888. Mitchell kept this method as a secret and sold it to individuals, many of whom were non-medical men, who traveled about the country advertising their treatment as a merchant would advertise his goods. The method received much criticism among the medical profession because of its secrecy and advocacy by the charlatan or quack.

Many cases were treated, and, no doubt, some good and much harm was done. The unfavorable results, with very little investigation, were made much of in medical literature, and the advantages and value of this method were not recognized by the medical profession until the last few years, when it was no longer a secret, and open scientific discussion and investigation began. Even at the present time, the average physician knows so little about this method of treatment that many advise against it.

As early as 1876, only five years after the introduction by Mitchell, Professor E. Andrews, of Chicago, collected 3,300 cases, which

*Read before the Medical Association of Georgia, Athens, Ga., May 12, 1927.

gives some idea of how fast many cases were treated when the method was first introduced. In 1915, or forty years after the introduction of the injection treatment, there were four different schools of opinion, each of which had its advocates among the leading men.

The first school held that carbolic acid was dangerous, and should not be employed. The second school advocated the use of carbolic in strengths of more than 20 per cent, removing piles by sloughing. The third school advocated the use of solutions of from 5 to 20 per cent, which would not cause a slough, but a reactive inflammation followed by fibrosis. The fourth school used various other solutions; quinine and urca, introduced by B. H. Terrell in 1913, probably receiving more credit than any other solution except carbolic acid. Some of the various other solutions, which have been used by different investigators, are iron perchloride, ergot, lead acetate, alcohol, formalin, and adrenalin. A review of the literature of the last five years shows that most of the advocates, who have had considerable experience with the different methods and solutions, are using a solution of phenol, varying from 5 to 20 per cent, suspended in glycerin and water. The solution I use in the great majority of cases is phenol drams 1, glycerin drams 3, water drams 4, or a 12 1-2 per cent solution. Morley recommends carbolic acid, grains 48, glycerin drams 2, water drams 2, or a 20 per cent solution.

The object of injection treatment is to produce, by irritation with a chemical solution, sufficient fibrosis to obliterate the net work of dilated blood vessels forming the hemorrhoids, causing them to shrink, and not sufficient to cause sloughing of tissue.

PATHOLOGICAL CHANGES PRODUCED BY INJECTION METHOD

Pathological changes following weak solution of carbolic acid injection have been studied microscopically in 10 patients by Anderson and Duke. In each patient one hemorrhoid was injected in the usual way, and this hemorrhoid together with a control not injected was removed by operation, one patient in one day, and the others after two, three, four, five, six, seven, twelve, fourteen and twenty-one days. The hemorrhoid re-

moved one day after injection showed the dilated vessels engorged with blood, and the surrounding tissue edematous, containing much extravasated blood, and infiltrated with polymorphnuclear leukocytes, no signs of thrombosis were present. The piles removed on the third day showed changes similar to the second day, with many forms of white blood cells, with proliferation of fibroblasts, no thrombosis. The hemorrhoid removed on the fifth day showed commencing thrombosis in many vessels. In the fourteenth and twenty-first days thrombosis was found in each, with some fibrous tissue and budding new capillaries.

They conclude that the early inflammatory changes that occur in the first three days do not play an important part in the cure of hemorrhoids. It is the secondary change, particularly the intravascular clotting and subsequent fibrosis to which beneficial effect must be ascribed. I do not concur with the first part of this conclusion for the reason that if it were not for the early inflammatory changes, which occur in the first three or four days, there would be no secondary change or subsequent fibrosis.

I know of no better way to explain the recent changes of opinion as to the injection method than to quote the late J. R. Pennington, who, in a lecture as late as 1924 before the Fulton County Medical Society, Atlanta, Georgia, stated that the injection method still belonged in the hands of quacks. About two years later, probably his last article published in the A. M. A., Volume 87, No. 25, he says that the advantages of the injection method are that it can be made use of when the patient refuses more radical methods, and since no general anaesthetic is administered, there is no post-anaesthetic disturbance, such as vomiting; there is no pain; the patient is not confined to the bed, so he loses only a few hours from work or business; and relief is immediate, and there is steady improvement. He further states that in the past injections were looked down on because of the advertising proclivities of their sponsors, but for years past they have been habitually resorted to, especially abroad. They command respect if for nothing else than the sheer weight of numbers.

Martin states that more than 4,200 patients were treated by his father and himself. Murphy of England used phenol injections "several thousand times" with good results. Fansler in about 1,200 injections of quinine and urea hydrochloride had a few instances of superficial sloughing, three of these with secondary hemorrhage, but the end results were uniformly good. Morley, in nearly 4,000 injections, had but one case of thrombosis.

Pennington also says: "I am thoroughly in accord with Morley, who in the course of his article recommending the injection method writes: 'I know very well that when medical men suffer from hemorrhoids they prefer injection to operation—if they have ever heard of the former—and I have had no more grateful patients than the many doctors I have treated. They admit when it comes to their own turn, they cannot afford to lag up, and that their experience of operation on their patients make them dread the first few days after the operation on their own piles. And who, I would ask, from a cabinet minister downward can afford to lie up in these times, if there is any way of avoiding it.'"

Edwards, an English proctologist states; "As an advocate for this method, I cannot put it stronger than by saying that if I were the subject of uncomplicated, reducible, internal hemorrhoids, which called for operative interference, I would select injection in preference to any of the recognized operations, always provided that it could be carried out by one who had had at least some experience of its simple technic."

CLASSIFICATIONS OF HEMORRHOIDS

It is generally agreed that internal hemorrhoids, without complications, are the only ones suitable for the injection treatment. Therefore, it is absolutely essential to have sufficient knowledge of the anatomy of the part, and to make a physical examination with such a degree of care that you will be able to differentiate between external and internal hemorrhoids.

External hemorrhoids are located about the lower part of the anal canal and the skin surrounding the anus, and implicate the inferior and middle hemorrhoidal veins, which termi-

nate into the internal iliac veins to join the systemic circulation.

The internal hemorrhoids are located within or above the sphincter-ani or in the submucous tissue of the upper portion of the anal canal and the lower part of the rectum, and consist of dilated branches of the superior hemorrhoidal veins, and terminate into the inferior mesenteric which empties into the portal vein. The lower part of the plexus communicates freely with the circular veins surrounding the anal orifice, one of the points of communication between the systemic and portal circulation. This is the anatomical reason for the frequent co-existence of internal and external hemorrhoids.

EXTERNAL HEMORRHOIDS

Under the term external hemorrhoids, clinically, four different varieties are noted.

(1) A simple dilatation or varicosity of the veins surrounding the anal orifice.

(2) The thrombosed external pile. Frequently there is a laceration or extravasation of blood around a dilated anal or peri-anal vein, which is usually caused by some severe muscular effort and a blood clot is formed within or around the vein, and this forms a tumor mass which is covered with skin. This condition is known as a thrombosed external hemorrhoid.

(3) Connective tissue hemorrhoid. This type consists merely of hypertrophied or redundant skin tabs, which are frequently the terminal results of a thrombosed external hemorrhoid not treated, or the stretched skin which covered the swelling caused by the thrombosed pile, the thrombus having been absorbed leaving the redundant hypertrophied skin tab. Other cases follow badly performed operations for internal hemorrhoids, particularly where the sphincter has been roughly stretched.

(4) Inflammatory hemorrhoids are any type which have become infected.

External hemorrhoids will not be discussed further, as they are surgical and not suitable for the injection method.

INTERNAL HEMORRHOIDS

Internal hemorrhoids may be divided into three degrees for description as to size and protruding of tumor mass and for discussion of injection treatment.

First degree: The veins are varicosed, but do not form very distinct tumor masses, and remain inside the anal canal and the lower part of the rectum.

Second Degree: The veins are dilated and form distinct masses, which protrude during defecation, but return spontaneously after the act.

Third degree: The hemorrhoids or tumor masses in this degree protrude and remain protruded, or can only be returned with much difficulty, and are frequently complicated with prolapse of mucous membrane and a relaxed sphincter muscle.

METHOD OF INJECTION

Internal piles of the first degree must be injected through a speculum, as this is the only possible way of exposure. Piles of the second degree can frequently be made to protrude by having the patient to sit on the stool and strain as he would to evacuate the bowels. The tumor may, or may not protrude, according to the size of the mass. Where this does not expose the hemorrhoids after the patient has been placed on the table and the buttocks gently separated, the patient is asked to strain down again, and frequently this will expose the tumor mass long enough to give the treatment. If the above efforts fail, then they must be located through a speculum and treated as internal piles of the first degree.

Internal hemorrhoids of the third degree are exposed and easily injected. There is a difference of opinion as to whether the protruding mass should be injected and allowed to remain down, or whether it should be returned into the anal canal immediately after injection. Morley insists that all piles, regardless of degree of protruding parts, should be returned inside the anal canal immediately after treatment, and the patient advised, if they should return, to grease with some simple ointment, wash with cold water, and replace at once.

My experience has been that the best results are obtained in prolapsed piles of very marked third degree with relaxed sphincter by allowing the protruding part to remain down, as the strangulation is not sufficient to cause any serious trouble. In more than fifty per cent of this type of cases treated in this way only one injection was necessary, pro-

vided all tumors were injected at the same sitting. In no cases have I had any sloughing. The chief objection is that the patient is confined to bed three to six days until the protruding mass has receded.

CONTRA INDICATIONS

Injection method should not be used in: (1) external hemorrhoids or any structure covered by true skin; (2) rectal ulcer; (3) rectal fistula; (4) strangulated irreducible hemorrhoids with marked prolapse of mucous membrane of rectum; (5) marked hypertrophy of sphincter; or (6) any active inflammation.

RECURRENCES

Pennington estimates that 10 per cent of the patients referred to him for hemorrhoids have been previously operated upon two or three times. Martin estimates that in 4,200 cases treated by injection method 15 per cent have recurrences in three to five years. Morley in his study of 300 cases in 1920 found recurrences in 16 per cent of them. He estimated that the recurrences in the number of cases referred to him for injection after operation were more than 5 per cent.

In a follow-up of 200 cases of internal hemorrhoids, treated by the injection method, of which at least 15 per cent were doctors, I have had about 10 per cent known recurrences. In more than 350 cases operated upon, including all types of external and internal hemorrhoids, the recurrences were from 5 to 8 per cent. I admit that my follow-up system is poor, and that some of my recurrences have probably drifted to other physicians.

A REVIEW OF CASES

In a review of 50 of my most recent cases the results are noted as follows:

In one case, second degree hemorrhoids, which had a slight hypertrophied sphincter, the patient had severe pain for four days which required morphine, but no further complications.

In five cases it was necessary to give morphine the first twenty-four hours.

In thirty-seven cases there were slight pain for from two to twenty-four hours; codein gr. 1, caffeine gr. 1, aspirin gr. 5, three to six hours, was all that was needed.

In seven cases there was no discomfort. Bleeding after bowel movement before treat-

ment was stopped immediately after treatment in all cases.

Bowel movement: All patients had bowel movements daily with very little or no discomfort, with the exception of one who was given an enema on the second and third days.

Catherizations: None.

There were two recurrences, both of which were relieved by a second injection.

Recurrences: One of whom a doctor was injected in the afternoon, and left on the eight o'clock train for his home in South Georgia, and was not seen again for two years. When he returned, he had two piles of the second degree. He was injected again, and left in 24 hours for home, and I have not had an opportunity for further examination. In a recent report he states that he has had no further symptoms.

The other patient had three piles, second degree. He was confined to his home for one day—never returned to office for further examination until eighteen months later, when he had three piles, one of the first degree and two of the second degree. He has since had a second treatment with complete relief of symptoms.

Strictures: None.

Infections: None.

Complications: None.

Loss of time: None to fourteen days, average four days.

Deaths: None.

CONCLUSIONS

(1) The relief of symptoms after the first treatment by the injection method is so complete that it is frequently hard to get the patient to believe that he needs any further treatment and is satisfied to let it go at that. This increases the percentage of recurrences.

(2) There is little difficulty in persuading the patient to have further treatment after the injection method, and he is more likely to return to the doctor who gave him previous relief.

(3) It is absolutely essential to have sufficient knowledge of the anatomy of the part and to make a physical examination with such a degree of care that you will be able to differentiate between external and internal

hemorrhoids, as only the internal type without complications is suitable for this method.

(4) The injection method is not without fault, but must be recognized as one of the standard forms of treating internal hemorrhoids.

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DISCUSSION ON PAPER OF DR. PRUITT

Dr. A. Elkin, Atlanta: In this field, of course, I am not particularly interested. I will say also that I know nothing about it, but I do know something about Dr. Pruitt's work from the work he has done for me. I had a case of a young man about thirty-five years of age, whom I believe was kept alive on tuberculin for eight or ten years. He had pulmonary phthisis. He seemed to thrive on tuberculin and when we took him off he grew worse and when we put him back on it he picked up. He developed hemorrhoids, the bleeding type. Eight or nine years later Dr. Pruitt did at my request his injection method. The simplicity with which he did it impressed me very much. This boy was in the home of a very neurotic family where the father and husband had died on the operating table. Dr. Pruitt in the boy's bed at home within ten minutes injected two or three small internal hemorrhoids with his carbolic solution. The boy got well as far as his hemorrhoids were concerned. They had been bleeding constantly for seven or eight weeks.

Dr. Pruitt read a paper similar to this before the Fulton County Medical Society and said there just what he has said to you. One of our leading surgeons of Atlanta, Dr. W. S. Goldsmith, told Dr. Pruitt he was a fool or a nut or something to do anything like that. It so happened that a boy under Pruitt's injection treatment had gotten well. Dr. Goldsmith had forgotten that two years before that time he had operated on this boy and thought he had cured him but the piles returned with much bleeding.

The point I want to stress is the simplicity of Dr. Pruitt's method. I do not know anything about hemorrhoidectomy or the injection method, but the lack of discomfort in this method is certainly enough to convince one of the efficacy of this procedure. I do not object to this method in the hands of some one like Dr. Pruitt because he knows how to do it.

Dr. T. Toepel, Atlanta: I was very much afraid that I might not get here in time and I am glad to say that I am in time to hear Dr. Pruitt's paper which he has presented so well. It seems far fetched for me who is interested in orthopedics to connect that up with hemorrhoids, but I want to tell you that there is a close relation. I remember one case where a man with a severe sacro-iliac sprain had consulted a number of doctors and did not get relief. He had plastered jackets applied and corsets applied. Then he was threatened with the diagnosis of tuberculosis and every one of those men failed to make an examination of his rectum. Upon recommendation this particular patient went to a specialist of that nature and it was discovered that he suffered with a severe case of hemorrhoids. The hemorrhoids were removed and from then on he improved, so the close relation between hemorrhoids and the apparently severe sacro-iliac condition.

I just want to say this to the men who are engaged in railroad surgery, not to forget the rectum when they have one of those sacro-iliac conditions which are so complicated to the lawyer and to the surgeon.

Another thing that I would like to stress here is the close relation between this condition and the severe sciatica which in one case followed the removal of hemorrhoids. I do not know whether the surgeon removed a little more than was necessary or not but it was a complete Whitehead removal of hemorrhoids. The patient came to me suffering with sciatica. Of course there was nothing to restore that connection between the nerves which make up part of the sciatic nerve and the rectum. The damage was done and no matter what treatment was resorted to the sciatica continued. It shows the two extremes in treatment of this condition and the close relation between hemorrhoids and orthopedic conditions.

Dr. M. C. Pruitt, Atlanta (closing the discussion): I do not want to inflict on you any more of this subject. I want to quote one man from the Mayo Clinic who recently in a paper in the *North American Clinics* discussed the injection method. In this article Buie says, "Let us not turn our back to the injection method, as it is suitable for certain selected cases. Otherwise we drive them into the hands of the quack." I do not feel like

Dr. Buie. I have not assumed that attitude. The attitude I have assumed toward the injection treatment is on the basis of the results received from the treatment, and not from what it may send to the quack. I am working on a basis of the result obtained by the injection method as compared with other standardized methods of treatment.

I want to thank Dr. Elkin for the discussion. His patient was a poor risk and not suitable for radical operation. I do not think I have had any more grateful patient than Dr. Elkin's patient. It was about a year ago and he has had no recurrence and the injection certainly did not pull him down and lower his resistance to tuberculosis.

Dr. Toepel's suggestion as to hemorrhoids simulating other diseases, I do not think there is any place in the human body that causes more nervous disturbances than a marked, persistent subacute inflammatory condition of the anal canal and rectum caused by a protruding hemorrhoid. A man with hemorrhoids loses weight, gets grouchy and wonders what is the matter. After his hemorrhoids have been treated, he really is surprised at the complete relief of symptoms. This patient who had the Whitehead operation developed a septicæ afterwards. I want to say this: I had the pleasure of serving at one time, in a big clinic, where they did a lot of Whitehead operations. I have never done one since I left that clinic. That is too radical a procedure. I think we have conservative measures which are much better.

PATHOLOGIC CHANGES IN FAUCIAL TONSILS

Among the 1,000 excised facial tonsils examined by Albert S. Weleh, Kansas City, Mo. (Journal A. M. A., Dec. 24, 1927), there were found two tuberculous lesions (0.2 per cent), and one malignant (0.1 per cent) and one non-malignant papillomatous lesion (0.1 per cent). There was no evidence of actinomycosis, syphilis or angiomas. Of the tonsils examined, 43 per cent did not reveal any evidence of gross change whatever, and 28 per cent were not altered except for cheesy cryptic concretions (so-called chronic cryptic eartarrhal tonsillitis). Only 7 per cent of all the tonsils examined were ulcerated or contained true abscesses. Large pieces of muscle were attached to 13.9 per cent of the tonsils examined. It was interesting to note that the greatest portion of nonchanged tonsils was obtained in September, the opening of the school year, and in June, the opening of the summer camps. When several pairs of tonsils were removed on the same day from different members of the same family, one pair usually bore evidence of infection and the others were not altered.

RAT BITE FEVER*

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It is said that sodoku or rat bite fever has been known to the inhabitants of India since ancient times. The disease was first reported in American literature by Whitman Wileox¹ in 1839. In 1903, Evans², reporting three cases of his own, collected fifty-five from the literature. Of these, two occurred in Europe, fifteen in America, and thirty-eight in Japan. In 1916, Blake³, supplementing Crohn's summary of fifty-three recorded cases, found twenty-seven more which brought the total at that time to eighty. Since then, and following the isolation of the specific organism, one hundred and eighty-nine cases have appeared in the world's literature, distributed as follows:

Australasia, 3; Austria, 1; Brazil, 1; British E. Africa, 1; Canada, 1; Ceylon, 2; China, 2; Dutch E. Indies, 2; England, 12; Finland, 1; France, 29; German E. Africa, 2; Germany, 2; Hawaii, 1; Holland, 4; India, 14; Italy, 44; Japan, 18; Lithuania, 1; Mexico, 5; Orient, 1; Philippines, 1; Portuguese E. Africa, 1; Russia, 4; Scotland, 1; Spain, 3; Switzerland, 1; Syria, 1; Tripoli, 1; Turkey, 1; United States, 28.

During the past three years the writer has observed three cases of rat bite fever in Georgia. The first came to his attention at Emory University when he was asked by the patient's brother to confirm a diagnosis of malaria. The second, after receiving several antirabic treatments, was referred by Dr. Birdsong, of Athens, at the suggestion of the State Board of Health laboratories. The third was a patient in the pediatric ward at Grady Hospital where the initial wound was being treated as a simple cellulitis. From two of these, the organisms were isolated by animal inoculation. In the third attempt the inoculated mice died before the end of the incubation period and after the patient's recovery.

Lanford,⁴ in 1926, noted that the organisms had been isolated from only two other cases

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in the United States, once by himself and Lawson⁵ and again by Shattuck and Theiler.⁶

In recording his experiments, the author wishes to acknowledge his indebtedness to Drs. Birdsong, Patillo, Ennis, Roberts, Strickler and others responsible for the clinical care of the patients.

ETIOLOGY

The infectivity of the disease was first proven by Ogata⁷ who inoculated guinea pigs with an emulsion of enlarged nodes from human cases, and caused other animals to be bitten by wild rats. He at first thought that the infection might be due to a protozoa, but later⁸ erroneously concluded that an aspergillus was the offender. Shottmuller,⁹ Blake³ and others attributed the disease to an invasion of a streptothrix.

In 1916 Futaki, Takaki, Tanaguchi, and Osumi,¹⁰ Japanese investigators, isolated from the blood and glands of two patients a spiral organism which they named *spirocheta morsus muris*. It was described by them as 1.5 to 6 microns in length and .4-.5 microns in width, possessing two to six spirals, and staining with Giemsa's or any of the analine stains. Its biological characteristics placed it with organisms previously described as parasitic for rats: and Kusama, Kobayashi, and Kusai¹¹ after a study of human, wild rat, and field vole strains, came to the conclusion that the *spirocheta morsus muris* (Futaki), *spirillum minor* (Carter) *spirochaeta laverani* (Breinl et Kinghorn) the *spirochaeta muris* (Wenyon) are one and the same.

The organism is readily demonstrated in dark field preparations although its movements are so rapid that it may at times escape notice. Possessing flagellae at both ends it darts like a flash in either direction. It bears no resemblance to either the *spirocheta pallida* or the *spirillum* of relapsing fever.

Laboratory white rats and mice, when inoculated, carry the infection without apparent injury to themselves. Our experiments, like those of others, have shown the incubation period in these animals to average seven to ten days. The organisms are most numerous in the peripheral blood stream about a month following inoculation. Thereafter, the number decreases until at the end of two or three months a persistent search may be necessary

to demonstrate their presence. The blood of one of our white rats, however, remained infective for six months.

Guinea pigs, after a period of loss of weight and marked alopecia, usually succumb to the infection. Kusawa demonstrated the organisms not only in the organs of such animals, but also in the various fixed tissues, which would indicate that they share with other spirochetes an apparent affinity for connective tissue.

Demonstrating the prevalence of the infection, the original investigators found one out of forty-three rats examined infected, and Futaki later concluded that 3 per cent of the house rats of Japan were carriers. The writer has examined seventy-three wild rats caught in Atlanta and vicinity but found none to harbor the spirochete in the peripheral blood stream. To the best of his knowledge, no other attempt has been made to determine the incidence of the infection in the United States.

In some of the cases reported, the person bitten has described the animal as mangy, and occasionally it has had to be killed to release its hold.

Other animals than rats have been accused of infecting human beings, and ferrets, weasels, squirrels, cats, and even the owl stand condemned in rare instances.

CLINICAL COURSE

Like syphilis, the infection in man is first localized at the seat of inoculation, becomes generalized after a period of incubation, and then manifests itself in cutaneous lesions from which the organisms may be isolated.

In the series of reported cases studied, the incubation periods varied from a few hours to two months, and averaged fifteen days. Inoculation has usually occurred on one of the extremities, but other parts of the body have not escaped, and the brow, face, scalp, and trunk have been the sites of the initial lesion.

Following the bites, the wounds have usually quickly healed and later, with the onset of systemic symptoms, shown evidence of infection. In some instances, however, there has been no sign of secondary activity. The lesion at the site of inoculation most commonly reported was a raised purple-red macule with an irregular margin and varying in size from

a split pea to two inches in diameter. Sometimes there was a pustule, surrounded by a dark red indurated areola, and filled with serohemorrhagic fluid in which the spirochetes were found. One writer has likened the appearance of this latter lesion to the pustule of anthrax.

Constitutional symptoms include an initial chill, elevation in temperature, rapid pulse, nausea and vomiting, headache, muscular pains, and extreme nervousness. Pain has been frequently so severe, especially in the region of the bite, as to require morphia. Enlargement and tenderness of adjacent lymph nodes and accompanying lymph-angitis have seldom been absent.

Usually within forty-eight hours after the onset, the fever has reached its fastigium and the other symptoms their maximum intensity. The temperature has fallen by crisis or lysis and been followed by profuse sweating. The local symptoms have then become less severe, and often the lesion about the bite has disappeared. Rarely a continuous temperature has been reported.

The initial paroxysm has lasted from two to ten days and the course thereafter been characterized by alternating attacks and remissions, varying in length according to the stage of the disease. In the early stages, paroxysms and remissions often have been of equal length; but the later lengthen as the disease progresses and periods of a month or more of apyrexia have intervened between attacks of lessening severity.

Sometimes the initial skin lesion has recurred with succeeding paroxysms but more frequently it has been present for only a very brief period, to be easily overlooked or forgotten.

Other skin lesions with both local and general distribution occur with the second and following attacks, and from them the spirochetes have also been isolated. The lesions most commonly reported are similar in appearance to those occurring at the site of inoculation, viz: varying sized purplish red, urticarial like wheals. Usually they first appear in the neighborhood of the bite, subsiding with the attack, and with succeeding paroxysms extend over larger areas and to distant parts. Sometimes a more diffuse erythematous

rash has made its appearance upon the chest and back and rarely has covered the whole body. It has often been accompanied by severe itching.

PATHOLOGY

Inasmuch as the organism has never been found in the saliva of infected animals, it is assumed that inoculation occurs through a wound in the rat's mouth.

With the advent of systemic symptoms the spirochetes may be isolated from the initial lesion, blood, lymph nodes, and secondary skin lesions. Other laboratory findings include a consistent leukocytosis, which has reached over 20,000, with an increase in the per cent of neutrophils. Albumen and occasional hyaline casts may be present in the urine. Positive Wassermanns have been reported.

While, without treatment, the disease runs a protracted course, it has rarely proved fatal. The available autopsy material is insufficient to justify a classification of morbid changes.

TREATMENT

Arsphenamine is a specific and rarely more than two small doses have been necessary to effect a cure.

SUMMARY

(1) Sodoku, or rat bite fever, is a disease transmitted by the bite of a rat carrying the spirocheta morsus muris.

(2) The writer has isolated the organism by animal inoculation from two of three cases observed in Georgia.

(3) Seventy-three rats caught in Atlanta and vicinity were examined, but none were found to harbor the parasite in their peripheral blood stream.

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DISCUSSION ON PAPER OF DR. LEADINGHAM

Dr. V. P. Sydenstricker, Augusta: Dr. Leadingham is to be congratulated on his extremely interesting paper and particularly on the fact that he has isolated organism in two out of three cases, which is certainly a splendid average because, as he says, in many cases which have been reported heretofore the causative organism has been isolated in only two or three.

Rat bite fever is unfortunately an uncertain term because in the early reports of cases in this country other organisms were found, particularly the streptothrix, as Dr. Leadingham mentioned. The term "sodoku," which is the Japanese name of the disease is probably the one which should be employed because it implies an infection with spirocheta morsus muris.

I think Dr. Leadingham's paper is of practical importance because it brings this disease before us so that we will learn to recognize it. I think all of us can recall patients who have been bitten by rats with severe reactions in which the diagnosis of streptococcus infection was made. These patients were treated surgically and with streptococci vaccine without any improvement and then gradually got well. I can recall two such cases when I was an intern in which the true nature of the disease was never recognized. It is fortunate that rat bites are uncommon because the percentage of infection is rather high. Certainly a large percentage of those who are bitten develop infection with the spirochete. Personally I have never had an opportunity to see one of these cases since the etiology was recognized. There was one case in our city and fortunately it was recognized and treated specifically though the organism was not recovered. The character of the disease is rather specific and it should not be confused with any other infection. The history of rat bite, the irregular lesion with the late development of rash, the swelling around the site of the bite should lead one to believe that he is dealing with a very rare infection. It is usually confused with erysipelas. The disease may be confused with malaria and it has been confused with typhoid fever. In this country I think Dr. Leadingham has made the only

effort to find out the prevalence of infection in wild rats. It is certainly something that should be done on a large scale.

The use of this organism in the treatment of paresis is of interest. Solomon, of Boston, has lately used the parasite of spiracheta morsus muris, thinking it was a parasite that could be better controlled than malaria. He has used this to develop recurrent attacks of fever.

Rat bite fever is a disease which can be controlled with arsphenamin. It offers great promise if the parasitic treatment of paresis is of value.

Not having had an opportunity of seeing a case of this disease I do not feel justified in discussing it further. I think we should congratulate Dr. Leadingham on his very careful observations in this paper.

Dr. W. A. Mulherin, Augusta: Dr. Leadingham's paper has been of quite a little interest to me due to the fact that about six months ago I was called over the phone by one of my patients who stated that her little one had an infected finger. I was quite busy at the time and asked her if she would have her surgeon see the child. They had an excellent surgeon, one of the best we have at home. He saw the finger, reported to me that it was badly infected and was rather fearful that he would have to open it. He did. There was a hard, indurated swelling on the finger. He was fearful that it might go up and require some incisions high up on the hand. He opened it and said there was hard indurated mass. He expected to find pus but there was none. He finally asked me to see the little one and I did. I happened to recall that I had read about rat bite. Inquiry revealed that about ten days before this happened this child had a rat bite at the end of the finger. The bite itself had healed in eight or ten days and then the symptoms started. The child ran a very high fever and every evidence of infection was there. When I was called to see the child the surgeon was considering the advisability of taking off the finger. I suggested that it was probably a rat bite case and neoarsphenamin was used with very brilliant results. In about three or four days decided improvement was shown. Another dose of arsphenamin did up things beautifully. I mention that as the practical side. I think the surgeon should always bear in mind the possibility of this infection if there is a history of rat bite.

Dr. R. S. Leadingham, Atlanta (closing the discussion) I wish to thank Drs. Mulherin and Sydenstricker for their discussion.

Sketches of the organisms appearing in the blood of laboratory animals and a copy of the temperature chart of one of our cases may be found in the section of scientific exhibits.

CHRONIC DUODENAL ILEUS*

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Chronic duodenal ileus is one of the less frequent causes of gastro-intestinal pathology, and varies greatly in its etiology and clinical course. However more careful interpretation of gastric complaints and modern methods of investigation have shown that in many instances symptoms that were formerly ascribed to the gall-bladder, appendix, peptic ulcer, or to a "fallen stomach," auto-intoxication and to "bilious attacks" have their origin in the duodenum, and one who reads the current literature is impressed with the increasing recognition devoted to this subject.

The duodenum arises by two-fold origin. That part from the stomach to just beyond the entrance of the bile duct comes from the foregut, while the remainder develops from the midgut. Though the shortest sub-division of the small gut it has the widest diameter normally and under certain conditions this may become markedly increased. The duodenum begins at the level of the first lumbar vertebra on the right side and after describing almost a complete circle ends near its beginning. About 2.5 cms from its termination the duodenum is crossed by the root of the mesentery containing the superior Mesenteric artery and vein. These structures naturally constrict the lumen to a certain extent and at times may bring about a considerable degree of obstruction at this point, producing a chronic dilatation of the duodenum with retention of contents. This state of affairs while comparatively infrequent, exists often enough to be the cause of certain discomforts that may not be recognized as such by the examining physician and as shown by A. F. Hurst¹ may be a predisposing cause of ulcer.

Any part or all of the duodenum may be involved, and a number of factors other than compression by the superior mesenteric vessels have been mentioned as causative agents. Developmental defects, constricting adhesions

or congenital bands may produce obstructive symptoms. Since the terminal duodenum is normally constricted to a slight extent by the root of the mesentery, the degree of obstruction must be increased in visceroptosis by the dragging of the fallen intestines on the mesentery. If this was the only factor however, the condition would be more common, especially in women with relaxed abdominal muscles, and it is probable that this is really the pathology responsible for many symptoms such individuals often complain of, and who so often are treated for "fallen stomach" and at times subjected to gastro-plexy and usually without benefit. Excessive mobility of the proximal colon associated with cecal stasis and the giant cecum described by Bloodgood² will increase the normal constriction of the terminal duodenum by pulling on the right fold of the mesentery, as will also inflammatory conditions about the cecum by shortening this peritoneal reflexion. These factors may give rise to no symptoms in a person with vigorous intestinal muscles and an abdominal wall of good tone, but as advancing years or debilitating diseases weaken these structures symptoms are likely to appear. The condition may lie dormant in health only to become grossly apparent as an acute dilatation of the stomach and duodenum following an abdominal operation. Bloodgood² cites such cases, and while all cases of post-operative dilatation of the stomach are not dependent on compression of the duodenum by the root of the mesentery, it is clearly established from the large number of operative and post-mortum observations that such is a quite common cause of this catastrophe. Obstruction produced by the right colic artery in a case with floating proximal colon is mentioned by Wilkie³ and he quotes several other writers.

It would seem that an all-wise nature would hardly have placed the duodenum in such a favorable position for compression as between the spine and the root of the mesentery, without providing some way of avoiding pressure but as has been pointed out by several writers on this subject, this arrangement was originally planned for horizontal animals and is out of place in a vertical animal who rests in a dorsal position especially when sick. This is exaggerated by the pressure produced by

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belts and corsets (if any are now being worn).

The first recorded case of dilatation of the duodenum is an article written in Latin and by Boernerus⁴ in 1752, referring to the work of Celsus and Sylvestus, and describes a case in detail. In 1820, Yates⁴ described a case presenting toxic symptoms which he attributed to compression of the duodenum by the transverse colon. Anderson⁴ in 1848 made the first report appearing in American literature. In 1899 Allbrecht⁵ reported two cases of duodenal obstruction and noted the flattening of the gut between the spine and the root of the mesentery. Robinson⁴ in 1900 presented an original and most comprehensive paper on this subject reporting clinical observations and autopsy findings, and clearly showed the relation the mesentery bore to the duodenal obstruction. In 1905 Ochsner⁴ presented a paper in which he attributed much of the duodenal pathology to a sphincter muscle below the bile duct and the accuracy of this observation was questioned by Boothby⁴ in 1907. Since then many masterful papers have appeared—Connor, Bloodgood, Hurst, Wilkie, Devine, and others having written on this subject. Codman⁵ wrote a very instructive paper in 1908.

Experimental work as well as surgical experience has shown that retained duodenal contents may be of the highest degree of toxicity and it is becoming more apparent that the duodenum is a very critical portion of the digestive tract. There must indeed be, however, a wide range between physiological obstruction producing symptoms and complete mechanical obstruction, and Codman⁵ considered the condition only became pathological when the obstructing pressure reached a degree great enough to give more resistance to the propelling effort of the duodenum than the closed pylorus.

The toxic symptoms produced thereby vary in degree with the amount of obstruction present. The usual symptoms are such as nausea, vomiting, headache, mental and physical depression, feeling of suffocation, slow pulse, low blood-pressure, often a tinge of jaundice especially if the symptoms came on in the form of an attack; tenderness in the epigastrium and often pain similar to ulcer discom-

fort. If the pylorus is incompetent bile and duodenal fluids are regurgitated, and in the acute forms the loss of fluids is astonishing. If the condition is well marked the blood chloride is decreased and the blood urea increased. The X-ray may or may not reveal the true cause of the trouble. As the condition is inclined to be periodic the examination may be made between attacks and but little abnormality seen. It may, however, show accumulation of the barium in the terminal duodenum with exaggerated or reversed peristalsis in that organ.

Duodenal stasis besides producing toxic phenomena as enumerated, may, by allowing bacteria to multiply be a source of infection to its own walls and the frequent association of duodenal and gastric ulcer with chronic duodenal ileus seems to suggest the latter as a possible factor in the development of ulceration. The escape of duodenal contents through a biliary fistula following operation on the bile passages is a certain symptom of duodenal obstruction and suggests the possibility of such a means of bile ducts becoming infected from a chronic duodenal ileus. Every surgeon of any experience can recall cases of regurgitant vomiting following gastro-enterostomy, and should it be necessary to operate for the relief of this condition, the possibility of duodenal ileus should be kept in mind, and particularly in case the lesion was not definitely demonstrated at the time of the original operation.

The treatment of chronic duodenal ileus should first be medical, and prolonged rest, postural and abdominal supports, attention to the general health of the individual, careful dieting with rest in the recumbent position on the side after meals, may lead to permanent relief. In well marked or late cases duodeno-jejunosomy is clearly indicated. The anastomosis is carried out similarly to the technique of gastro-enterostomy the duodenum being exposed by opening the root of the transverse mesocolon. Kellog⁴ reports 41 cases in which this operation was employed with no mortality and complete cure in 31 of them. In three cases it was combined with gastro-enterostomy, and in 22 of the series the condition resulted from a previous operation, at least they had been previously operated on. It is

interesting to note that W. J. Mayo⁶ is the only one to report an unsatisfactory result from this operation, which he did to relieve a duodenal obstruction produced by a giant cecum.

Gastro-enterostomy while logically not as satisfactory a procedure, has been employed frequently with success by Lockhart-Mumery, and two of the cases I have observed have responded splendidly to this operation.

Devine⁷ considering abnormal sympathetic stimulation through the gastric nerves as a prominent factor in dilatation of the duodenum as well as in the colon and cecum, planned his operation of pyloric exclusion so as to break this chain of stimulation, and employs it for such cases.

Other operative procedures which attempt to remove the cause of the obstruction are employed by some, Bloodgood² removed the cecum and proximal colon in cases caused by the drag of these enlarged organs. Others have used various fixing operations to overcome the ptosis of the colon and intestines, and with uncertain success.

The purpose of this paper is to present to the society this less common clinical entity in the hope that it may stimulate an increasing amount of your attention. I might summarize as follows:

Chronic duodenal ileus may be associated with gastric or duodenal ulcer. Congenital defects and abnormalities, visceroptosis, mobile colon and giant cecum and perhaps abnormal sympathetic stimulation are predisposing causes. Acute dilatation of the stomach is probably often a gross manifestation of a previous chronic condition. Duodeno-jejunostomy is the operation of choice in late or well developed cases and should be a means of curing the so-called vicious circle. Three cases are reported.

CASE REPORTS

No. 1. Mr. L. D., Engineer, 28 years old, married. Admitted to hospital April 11, 1925, operated on April 24, 1925, dismissed May 15, 1925. Entered hospital profoundly prostrated complaining of persistent nausea and vomiting, weakness and headache. Began four days previously, he states that for no known reason that he just became weak and began to vomit, greenish fluid of very bitter

taste and later began to irritate lips. This grew steadily worse until nothing would stay down, not even water. Has had similar attacks at about yearly intervals for number of years, and has complained of indigestion all life. Two years ago he had several attacks of gnawing pain in epigastrium, accompanied by nausea and vomiting and immediately relieved by food or soda. But this type of attack had disappeared and he has had no pain with any of the present kind of attacks. The family, and past medical histories are unimportant. Examination: Well developed young man, prostrated in bed, skin very dry, slight tinge of jaundice on scleras, no other positive findings upon physical examination. Temperature 97, BP. 105-70, WBC. 11000, urine positive albumen. Treatment to restore fluids, and few days later X-rayed, which showed a deformity of the duodenum with stomach retention but wide open pylorus. At operation, no definite ulcer could be found. The jejunum, from the ligament of Treitz ran straight to the right, and pulling on the mesentery would cause an acute angulation at this point. Gastro-enterostomy was done and after a fairly smooth convalescence patient returned to normal and has remained so since, gaining approximately 40 pounds.

No. 2. A. H. Steward, age 58, married. Has typical symptoms of duodenal ulcer of nine years duration. Burning pain in epigastrium, radiating across abdomen and into back worse immediately after eating but is soon relieved by the food and remains comfortable for few hours when pain returns. Is very severe at night and he is obliged to keep soda and crackers nearby. Milk relieves pain immediately. Began in 1917 as fullness in epigastrium and later began having definite pain, often accompanied by nausea. Was operated on in 1919 and GB and appendix removed with absolutely no relief, and pain is now so severe that he is unable to work. Has been on diet for duodenal ulcer for three months with no relief. Nothing relative in family or past medical history, and positive finding physically are, weight 165 pounds, BP. 125-80, HB. 80 per cent, urine O.K. Number of teeth missing, scar from previous incisions over GB. and in right iliac fossa. Femoral hernia, and X-ray picture showing

pyloric ulcer with stomach retention. Operation August 16, 1926, showed extensive adhesions about the gallbladder fossa normal stomach. The terminal duodenum was as large again as the normal organ, and bulged out from behind the peritoneum most surprisingly. The beginning of the jejunum was plastered to the under surface of the transverse mesocolon by and exaggerated lig. of triets or a kind of Jackson veil and when freed was seen to run directly to the right instead of in the normal direction. Gastro-enterostomy was done and after a smooth convalescence as far as the stomach was concerned he has remained well so far.

No. 3. Miss J. P. Young, lady age 32, height 66 inches, weight 110 pounds, BP. 120-70, RBC. 4000000, hemoglobin 55 per cent. Stools positive for occult blood five days after a hemoglobin free diet. Urine negative. Complaining of feeling of suffocation and weakness immediately after eating with sense of heaviness after meals in epigastrium, no pain nor nausea but a peculiar feeling of inability to breathe. Began four months previously, has become progressively worse and is positively distressing for past week. Positive findings are tenderness over duodenum and in right iliac fossa, with X-ray showing obstruction of the terminal duodenum with exaggerated and reversed peristalsis at this organ. Most marked visceroptosis, stomach being deep in pelvis. Abdominal support gave no relief and was seen to be of no aid when viewed under fleuroscope. Advised to rest three months and to lie down after eating. Recent X-ray examination shows the condition unimproved and patient feels but little better.

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DISCUSSION ON PAPER OF DR. QUATTLEBAUM

Dr. C. Thompson, Millen: Dr. Quattlebaum has given us a very complete and thorough discussion of a subject that a great many of you, myself included, know very little about. I would not attempt to add anything to this paper but will only try to emphasize some of the points that he gave us in a very conservative manner. That is why he had such good results with his cases, because he was so conservative. He told you that these cases occur usually, practically always, in that class of patient that we have always coming, that is, the asthenic. We know that no matter how completely we cure that patient of his ailment he is not well nor will he stay well. He is an asthenic right along. He has other complaints that are continuous. If it is not one thing it is six others, usually more. So in making your diagnosis of chronic duodenal ileus you have a great many things to think about. When it comes to the question of treating these cases treat them but do not operate on them. Reserve your surgery for cases like Dr. Quattlebaum's where there is something definite for surgery to accomplish, then you will have brilliant results.

Dr. J. K. Quattlebaum, Savannah (closing discussion): I wish to thank Dr. Thompson for his remarks. I wish the others would have added something to what was said.

In this connection I would like to say that whenever a gastro-enterostomy is done for duodenal ulcer with no pyloric obstruction regurgitant vomiting is quite likely to develop and may be so severe as to be called a vicious circle. This is a misnomer, for the condition is really reversed peristalsis through the open pylorus. I think all of us have seen such cases. Some of them develop it after being put on liquids. Several of these cases that I have seen to my mind have been due to partial obstruction due to the dragging of the root of the mesentery across the terminal duodenum. The last such case that I had responded immediately to change in posture, elevating the foot of the bed turning the patient on the left side and repeated gastric lavage with large quantities of salt solution under the skin, with stopping of feeding by mouth. After they get stronger the diet can be started and increased very gradually.

The only thing I would like to leave with you is that this condition may be present in cases where it is not suspected, especially in women with marked gastropnoxis. X-ray examination may show gastric retention and it is not always due to the poor musculature of the stomach itself but in many times is in reality a true obstruction and duodenal ileus.

CONCERNING THE SO-CALLED IRREDUCIBLE MINIMUM IN SURGICAL MORTALITY*

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I sat once in the surgical amphitheater of a large eastern hospital and witnessed what appeared to me to be a faultless, radical resection of a carcinomatous breast. The operator, a finished exponent of surgical technique, held his auditors enthralled as his nimble fingers manipulated scissors and scalpel with the precision of a perfectly adjusted machine. We were more deeply impressed by his daring as tissue yielded swiftly at his bidding. His ability to demonstrate anatomical dissection caught envious eyes as step after step the operation proceeded to its completion. Now, the operation so precise in its conduct, so faultless, well-nigh bloodless, performed under the deathlike stillness of a modern anesthetic and amid the environment of an aseptic operating room is over and the patient—well, so far as we knew—was carried back to her room soon to be well and returned to her family. We had witnessed a miracle which had in our own generation emerged from the incomparable labors of Long, Pasteur and Lister to take its place high among the benefactions of mankind. We saw in that operating room a supertechnician using with consummate skill the armamentarium of his vocation. So intense was our interest in the steps in the operation, the kind of incision used, the method of closure employed, in brief in the artistry displayed by the surgeon that we lost sight of the patient. In the evening of the same day on entering a basement room to attend a class in applied anatomy, my attention was arrested by the presence there in the morgue of the subject which had but a few hours past held our attention in the clinic. To quote a bromide, the operation had been a success, but the patient had died. I doubt not that the patient in this case had received a modicum of attention. I am persuaded, however, that emphasis was in that case and at

that period of surgical advancement placed upon the technical side to the detriment of the patient's safety. The principle was right, then as it is now, i.e., complete and radical removal of a deadly newgrowth—but a good surgical therapeutic measure had, in this case at least, been carried too far and that which the surgeon sought to preserve, was lost.

It is but natural that the mind of a great profession dedicated to the alleviation of human suffering, but in its highest sense to the preservation of human life, should begin to examine into the causes which turned an unsatisfactory proportion of cases with promise of success into failures as represented by a mortality rate then accepted as normal. The aim of the conservative group in surgery was soon crystalized into slogans which sought to switch emphasis from technique and the doing of amplifications of procedure to operations which were applied only after a careful estimation of the patient's margin of safety. In the words of Moynihan "Surgery was soon made safe for the patient, but there remained the greater task of making the patient safe for surgery." With a mortality rate running as high as 10 to 40 per cent, growing out of the experience of pioneer surgeons, Maurice Richardson announced with a vision that transcended all known methods of safety that "surgical procedure must ultimately be without mortality lest the therapeutic effort be of greater menace to the patient than the disease." To this pronouncement, considered the figment of a dreamers' mind, and thus seldom subscribed to by the average surgeon of twenty years ago, others responded that there was an irreducible minimum soon to be reached and that losses running into then accepted high percentages must be considered normal and accepted as the price surgical patients must pay in return for the benefits to be conferred. To one or the other of these schools of thought the surgeons of America and the world gave allegiance. It is needless to suggest that progress followed the efforts of the Richardson School whose followers dreamed of a day when surgery would be shorn of its tragic deaths. The older members of our society have seen the art of surgery grow from the proportions of a pygmy to the stature of a conquering giant. In a single

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generation its triumphant march has brought us from the period when the surgeons' art was largely confined to bone setting, stone crushing, excision of superficial tumors, amputations and the like, to our own day when the intrepid surgeon invades the innermost secret places of the body to handle at will such vital structures as the heart and brain. So phenomenal has been its advance and so alluring its opportunities for spectacular service that medical men in increasing numbers have left the fold of the family physician of blessed memory and the field of internal medicine of a later period—which sought to perpetuate the science of therapeutics as well as to apply the newer knowledge of bacteriology and pathology—to join the ranks of those who set themselves to the task of removing the offending malady by the scalpel. This new challenge of surgery in our generation although drawing in its wake many whose interests lay in novel appeal and its more adequate financial returns has had notwithstanding, the devoted and sacrificial services of a host of consecrated men of medicine whose contributions both to the science and art of surgery, have raised it from a specialty fraught with a paralyzing death-rate to its present position in which we find a nearer approach to a perfected science.

Thus enemies have been met and have succumbed to the ambitious attack of the patriots who have gone before, to whom we owe so much and by the fruits of whose labors, let us remember, we are now able to enjoy so many advantages. One need hardly to recount the victories—the passing of laudible pus, hospital gangrene, healing by second intention, the crude control of hemorrhage, the menace of poorly chosen and administered anesthetics, the inadequately prepared patient for surgical attack—such foes have yielded to a better day in which the axiom which avers that surgical procedure may be without mortality, finds a more attentive ear. Certainly we have advanced to a point in the mind of the profession which calls for explanation when surgical catastrophes repeatedly set at naught the surgeon's effort. The American College of Surgeons have here made its colossal impression and may it be said to their undying glory it is a wholly unselfish service which has been rendered mankind. We are

still faced though with the old question, what about the danger and what of the immediate outcome when patients are confronted with the ordeal of an operation. Asepsis, improved technique, new and skillfully administered anesthetics, good hospitals, the coming of the trained nurse, the growth of pathologic physiology, the application of the principle of early operation with its sequence low mortality, the discovery that there is a time to operate and a time to wait for nature's fortification, but particularly, and I think of foremost importance, the growth of a surgical conscience which feels responsibility for results, has given birth to a new day in which we serve—a day of constantly falling death rates in hitherto dangerous groups of cases—a nearer approach still to the irreducible minimum. But our goal still beckons us onward and sets a cheering mark to which we must strive. That we have brought the mortality in certain groups of surgical diseases such as goitre down from 40 to 16 per cent, 1 per cent or less and general groups from 18 to 10, to 2 and 1 per cent must not permit us to lose sight of the fact that there are enemies to our patient's safety still lurking behind unapproached embattlements. Now what of the situation in Georgia? Have we permitted ourselves to accept as normal or to be expected an abnormally high deathrate? Are we explaining our errors of judgment or our failures to apply accepted measures of safety away on the ill-founded pretext of unavoidable or normal losses?

This society yields to none with respect to the high type of manhood which characterizes its members. For years our leaders in the fields of internal medicine and surgery have been men equipped with a high degree of professional training. The will to do right, to walk humbly, to do justly, to accept and squarely meet responsibility, to avail one's self of the accepted advances in our profession from year to year, with which we may and should surround our patients, is woven into the warp and woof of Georgia doctors as it was so much in evidence in our predecessors. There is no room in such an atmosphere as pervades this society, for one whose motives are set in operation by expectation of monetary reward at the expense of the pa-

tient's safety—and yet we must constantly purge ourselves of such unholy attributes and see to it that our several component societies, our hospital staffs, our medical schools make sure that an ever increasing public opinion is moulded which offers no encouragement to a lurking tendency still alive in our profession as it is in those devoted to less altruistic vocations.

To turn now from generalities in which we have briefly reviewed the evolution of surgery and recounted its amazing advances as well as raised the question as to whether we as a society and as forward looking medical men have permitted ourselves to view too lightly the question of mortality rate as applied particularly to surgical practice, I desire to direct your attention to a few points which although known to all of us are always open for discussion in an effort to re-emphasize their importance as a means of bringing us nearer to the consummation of the ideal contained in the text—namely, a mortality rate in surgical practice shorn of all unnecessary deaths.

Due to the limit set on papers before this body, and in an effort to find terminal facilities which will bring us to a conclusion safely within the specified time, I shall content myself by simple reference in the conclusion to a few points which may be designated as "Golden Rules" for the successful accomplishment of the irreducible minimum in surgical practice.

Before proceeding to the designation of these well known but oft neglected principles of safety I cannot refrain from again expressing the conviction that the mortality in any surgeon's practice can never be reduced until there is a clean-cut breaking away from the notion that an established and satisfactory percentage of losses in any group of surgical conditions can be accepted as normal and therefore to be expected and calmly accepted. While it is true that simple groups of cases such as interval appendices, hernias, uncomplicated pelvic tumors and the like, may be dealt with, with only high school methods of preparation and pre-operative study and with only an occasional loss in the nature of a surgical accident, it is moreover in this very group that we find ourselves most lax in the

application of methods and measures known to all earnest students. Deaths in this group of cases furnish the real tragedies of surgery and result in making many sufferers from curable maladies loathe to risk the outcome of operation, choosing rather to suffer the "ills they have than fly to those they know not of." Of a truth lax preoperative study and preparation coupled with a lethargic conscience and a failure to make a careful assessment of the patient's margin of safety, is too often followed by the choice of an operative procedure for the correction of a quiescent condition which of itself carries a low potential risk, to have thereby substituted a hazard wholly unjustified and of even greater risk to the patient's welfare. We must be ever on our guard lest the operative cure be attended by a higher mortality than the disease which the surgeon seeks to eradicate. It is not, however, in this group of safe risk cases where ordinary care coupled with the fortitude of the patient may insure, in the main, satisfactory results, that we need to "Stop, Look and Listen," to adopt the slogan which heralds danger at the railroad crossing. The mortality rate which resists so stubbornly our efforts at reduction is found in patient's suffering from the terminal effects of long neglected pathology where gross changes present in the form of acutely inflamed organs or where normal physiology has been suspended and pathologic processes permitted to masquerade for months or years under mistaken diagnoses, have so impoverished resistance and crippled recuperating powers as to make surgical attack of gravest moment. Here we lose our patients and guilt often returns to doubly rebuke us, first for the delay which bespeaks lack of vision and initiative on the part of the rank and file of our profession and in the second place that a crippled patient harboring many incompetent organs should be carelessly subjected to radical surgery without first taking careful stock of its harmful potentialities. I think my point becomes apparent. Surgical procedure has been amplified and the methods of its application standardized. Now remains the duty of making the patient, each individual case with its own variations and its individual problems, safe for the needed surgical attack.

And now to conclude with the "Golden Rules."

1st. There must be a quickening of surgical conscience. Only a deep rooted acceptance of responsibility for outcome in operative procedure can furnish the urge that is required to constantly stand by threatening failure with the optimism of hope and with maximum efficiency. Death enters too often when the discouraged surgeon goes home to sleep.

2nd. There is no mortality rate in a given surgical condition which should be accepted as standard. Present mortality rates, bespeaking the victories of medical science over many factors which made them higher a generation ago are constantly yielding to the same method of attack that started them on the downward journey.

3rd. The greatest single factor, perhaps, in lowering present death rates concerns the question of early and prompt diagnosis. It must be accepted that the physician who is first consulted by the patient has it in his power, if only the responsibility is accepted, of making a decision which brings the patient to the surgeon ahead of the onset of complications which, in the large group of cases spoken of under the name of the acute abdomen are responsible for the majority of deaths. Appendicitis of itself rarely kills. Its complications and sequela, however, still head the list of causes of death in abdominal surgical conditions.

4th. Surgeons must accept the fact that there is an optimum time to operate, after a tentative diagnosis is made. The old rule to operate as soon as the diagnosis is made which in too many cases was another way of saying, operate as soon as the patient will be still long enough, must be altered so as to permit the application of special thought and needed variations of procedure to the individual case. There is no rule of thumb in surgery.

5th. Surgeons should strive to develop and apply standardized procedures. The cost to the patient is too high when the practice that makes perfect is done on private or charity cases. Teamwork and cautiously adopted variations of procedure lower mortality rates.

6th. There must be an occasional stock-taking among surgeons in order to see where

emphasis is being placed and to find the motive which activates them. The love of the spectacular, the desire for numbers by which success is often counted, the eye fastened upon the pecuniary gain, all such unsatisfying emotions should be outlawed and must take a subsidiary place to mortality and morbidity rates. A patient still suffering with the presenting symptom after operation is worse off, as is the surgeon unless both learn medicine by the error.

7th. In the "poor surgical risk" group timely preparation, well chosen anesthesia, proper and intelligent post-operative care overseen by experienced men who anticipate and properly meet threatening complications, constitute perhaps the most fruitful measures of lowering prevailing death rate percentages. Cells die without water and sugar furnishes the body's necessary fuel. Use them. The commerce of the body is water-borne and salt water-borne at that.

8th. Finally, the surgeons' mortality will be lowest who, having availed himself of an adequate technical training and then acquired by association with some seasoned surgeon or surgical clinic that exquisite thing called good surgical judgment, refuses to leave the post-operative care of desperate cases to the unsupervised care of the hospital intern staff. These wide awake men, picked because of special fitness and full of promise for the future, cannot be expected to function as efficiently as should the surgeon or his personally trained assistant. That personal or personally supervised care of patients yields a lower death rate may be attested by comparing mortality tables compiled by small clinics such as that of the Harbin Hospital of Rome where authority is centralized and procedure standardized to those of the large eastern hospitals, as well as those near at home, where there is a tendency to lose sight of the individual in a mad rush to serve large numbers.

Let us learn that the operation is only alpha and that omega lies twenty-three letters removed with besetting danger attending every turn in the journey. Our cherished goal is always a triumphant omega. End, results should be more and more the yard stick by which a surgeon's work is measured.

DISCUSSION ON PAPER OF DR. ROBERTS

Dr. R. M. Harbin, Rome: Dr. Roberts has brought us a message that should provoke careful study for we are too much inclined to dwell on our surgical recoveries which need no solicitude. He stresses the value of early diagnosis which really offers the greatest contribution to a low death rate. In considering the irreducible minimum death rate we might do well to study the negative side of the question and this leads us to ask what is the death rate without surgery. Every patient with a surgical disease is more or less of a sub-standard risk and it is frequently the case that surgery unavoidably makes this risk more acute, so it may become a matter of intelligent choice between two evils.

Some time ago we undertook to study gall-bladder disease with an without surgery. In twenty-five cases where operation was advised and not accepted the mortality after four years was twice that of fifty cases with graver conditions who submitted to operation. The Surgeon General's report gave a mortality rate of .23 per cent for mild cases of acute appendicitis that did not seem to need operation while the rate from operation for clean cases of a more advanced type of the disease gave a mortality rate of .65 per cent, a very small difference comparing the different grades of pathology. In suppurative cases the death rate was 15.38 per cent without operation against a rate of 3.43 per cent with operation. So withholding operation in doubtful cases does not by any means give us a zero mortality.

There are relatively infrequent contingencies that may determine disaster that cannot be anticipated and surgery is no exception for we are beset with hazards in every day life.

Dr. Stewart R. Roberts, Atlanta: It seems to me that Dr. Roberts has done not only the association service in reading this paper but the people of Georgia as well. There is a feeling among people as a whole that there are too many operations. There is a feeling among the general practitioners as a whole that there are too many operations. Whether these two parallel feelings are true I do not know. There is certainly a great deal of difference of opinion between internists as to whether patients should be operated on. I have seen a difference in opinion among surgeons as to whether patients should be operated upon. It is a fact that probably eighty-five per cent of the patients who are sick can be treated if the doctor has a good stethoscope, a good pair of ears, a good pair of eyes, and good common sense. The other fifteen per cent then justifies this remarkable paper. Dr. W. J. Mayo in a

recent paper said that a surgeon should have in himself three important features, great surgical skill, executive ability and finally judgment. His dictum to the young surgeons at the Mayo Clinic is to find something in the abdomen that accounts for the symptoms. Is not this paper properly reduced to its irreducible minimum a plea for the safety of the patient. I recently saw a patient on whom a surgeon had done a bilateral herniotomy because the patient had a bilateral hernia but he also had a bilateral pulmonary tuberculosis. He went home after the operation and died very promptly. The patient did not have a general physical examination before operation.

I look forward to the time when it will be contrary to law for a surgeon to do any operation on a patient unless that patient has had first a general, thorough physical examination. A physical examination is the greatest medical event in the medical life of any patient. It is the greatest thing that can happen to the patient. I look forward to the time when no patient will be sent to a major operation and no major operation permitted on a patient unless it is emergency surgery, unless the patient has been in the hospital long enough to get relaxed, get accustomed to his surroundings and get into the proper state of mind that permits him to stand a major operation. In the last analysis we find in every man or woman after forty some physical imperfection. It is not a question of whether there is an hypertrophy of the prostate, a stone in the renal pelvis or stones in the gall-bladder. We find them frequently enough. It is a question of the danger of thrombi, heart failure, shock, etc., as the result of the operation. A major operation is a dangerous procedure. Will it relieve the patient? Can the patients stand it? One reason for our difficulties is that we are not sure. The Europeans say that our surgical technic is unexcelled but our surgical pathology is lacking in thoroughness. How many patients are operated upon for surgical conditions when their entire condition generally is one of neurosis and involvement of the sympathetic nervous system. Our neurologists see these far fetched vagaries of the sympathetic system. Physical examination of the patient before operation, placing the patient in the hospital long enough before operation to be thoroughly prepared and then judgment on the part of the general practitioner, internist and surgeon, and above all safety first for the patient constitute a series of necessary events that justifies this paper.

Dr. C. H. Richardson, Jr., Macon: I think we might paraphrase the statement that surgery has been made safe for the patient and

the problem that lies before us now is to make the patient safe for surgery. For the past few years I have been interested in the poor surgical risk. I have had an opportunity to carry on some work of this kind on the gynecological service in the Macon City Hospital. I think this is an ideal place to work this out because you do not get the great emergencies that you get on a general surgical service. I want to outline to you our routine.

Every patient who is admitted has a complete history, complete physical examination, complete laboratory work. In the blood count we not only make a white and red, but a differential and Wassermann test. We do a functional test of the kidney. If anything is found lacking there we cystoscope the patient and determine if there is any kidney pathology. If the patient's hemoglobin is below fifty we give her a transfusion of whole blood; if necessary, a second transfusion. We are not hurried into the operation. We are not hurried by the desire of the superintendent of the hospital for a rapid turnover. We have found that a rapid turnover is not the best thing. If a patient is dehydrated we put her on forced fluids with large amounts of glucose. When the patient is ready for operation we give her before going to the operating room 1000 c. c. of normal saline by enteroclysis. We find that whenever a patient is on the table losing fluid as they all do in a prolonged operation, she still has some saline to act as a shock absorber and to tide her over this critical period. When she comes back from the operation she is given another 1000 c. c. If she develops any weakness on the table she gets an intravenous of saline before she leaves it. We pay a great deal of attention to the anesthetic. Generally we open the abdomen under local and do what manipulation we can, give gas and oxygen and then switch over to ether for the removal of a fibroid and then do the peritoneal toilet under gas or local. In that way we find the patient frequently comes off the table in almost as good a condition, if not just as good as when she went on. We then push fluids on that patient again. We are very careful in the post-operative treatment not to produce any irritation of the intestinal tract by cathartics. We never give an enema before the third day and we never give any food before the third day.

That routine over a period of three years has shown its worth. We were able to go through the year 1926 without a single death. Of course, a lot of that was luck but some of it was due to continuous application of these methods. No patient with an inflammatory condition is ever operated on until the inflammatory condition has entirely subsided.

We have kept some of them three or four weeks getting them quiescent. We every once in a while pick up a case of some intercurrent thing that we had no idea existed.

Dr. G. W. Quillian, Atlanta: If we accept the suggestion of both Doctors Roberts' that if an accurate diagnosis has been made and if physical examination has been accurately carried out, the patient is now ready for operation, it is unquestionably true that in a great many of these cases that have been accurately diagnosed and a physical examination has been made, the situation is safe if the patient does not suffer with what we call a post-operative acidosis. I am very glad that Dr. Richardson emphasized the importance of a preliminary preparation of the patient before operation. Dr. Crile some fifteen years ago pointed out very clearly that this post-operative acidosis was caused frequently by the liver producing acid by-products. So it has been the routine of our service at Grady Hospital for fifteen years to give the patient preliminary doses of soda as well as preliminary doses of dextrose. When we alkalinize our patients ahead of time the soda will neutralize any acids that still exist in the patient and the dextrose will prevent the formation of additional acid by-products by the liver. In addition, by giving as much fluid as can be conveniently taken by the patient giving enemas to be retained, either in the form of saline or in the form of dextrose, then your patient is really in position to be carried to the operating room and to be operated on. The preliminary preparation of your patient and the post-operative care are just as important, if not more so, than the skill and dexterity of the operation itself. So by using this preliminary treatment, we have obtained wonderful results and I am sure if Dr. Roberts had time to give his twenty-one golden rules of surgery, he would probably have brought out this suggestion that preliminary preparation and post operative care of the patient is just as important to the patient as the operation itself and in overcoming the shock the patient has had.

Dr. C. W. Roberts, Atlanta (closing the discussion): I wish to thank Dr. S. R. Roberts, for saying in his usual delightful style, that which prompted me to bring to this association a paper dealing with the ever timely question of surgical conservatism.

Dr. Richardson struck the keynote too when he began to talk of the details of preparation of the patient for surgery. That is what I hoped to leave with you—that a surgical operation consists of a vast deal more than merely making an incision, taking out an organ and sewing up a hole. The proper sequence might be summed up as follows. Study

your patient diligently. Weight consequences. Swap places and clothe yourself with the same presenting symptoms. Having now elected to operate, prepare for known and fortify against unknown obstacles. Operate with a consciousness of human frailty and err on the side of safety. Stand by with the optimism of hope coupled with an aggressive concern for contrary symptoms. Seek to know the end result for yours and your patient's welfare.

And now with regard to the so-called emergency case and speaking out of an experience of many years, I am forced to the conclusion that there are only exceptional instances where patients are faced with the grave necessity of being operated upon immediately on arriving at the hospital. Every one agrees that frank cases of rupture of viscera and other conditions of similar gravity need action and delay under any pretext is unjustified. Such cases, however, are rare compared to the great number admitted under the broad term "acute emergencies" and in which large group I feel perfectly sure an improved mortality rate would follow a program of careful aggressive study before electing operative attack. My own experience has taught me that a few hours observation in the hospital yields an opportunity for the election of a safe time for operation as well as a chance for making a more accurate diagnosis. My criticism therefore is against the loose application of the term "acute abdominal emergency" which too often furnishes an excuse for operating on patients who either do not need surgery at all or on whom better results might be obtained by wise delay. Finally the same careful attention should be given to the post-operative care as is practiced in the making of a diagnosis, the selection of the method and time to operate and the technical details practiced.

The conscientious surgeon is suspicious of mild post-operative complaints which run contrary to the smooth course with which we are familiar. Careful investigation of all complaints leads to early discovery of impending complications. Certainly their control will more frequently follow if the "stitch in time" maxim is applied. The splendid results obtained by the careful, scientific surgeon needs no encomiums in this day of brilliant achievements. That there is a time to operate and a time not to interfere with nature's beneficent processes seems to me to be of major importance in this busy day world in which we live and should be recognized by all those who would assume the responsibility of practicing the surgical art. Benjamin Franklin was right. When you are reasonably sure, "Go Ahead," but be reasonably sure.

THE COMMUNITY AND THE SMALL HOSPITAL*

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In the development of community resources for the small hospital, we must, in the words of Lewis Carroll, "Try all that we know and all that we don't"! The resources needed will be quite different indeed if there is a school of nursing in connection with the hospital than if there is not.

Let us assume that there is a school of nursing, because the average hospital does have one. Two questions at once present themselves. How can we give the best care to the patient at the minimum rate without in any way exploiting the student nurse? And how can we educate the nurse at no additional burden of cost to the individual patient? These questions are not easily answered, because in very few cases have small hospitals kept records which will give us the daily cost of nursing service, either in hospitals that have schools or those that are without.

Perhaps service to the patient might be more cheaply provided by some other form than student nursing service. For instance, by attendants under supervision, or by general floor nurses who have already completed their training. So far, attempts at either of these plans have not encouraged us to push them with vigor. First, because they so far have not seemed to be as satisfactory to the patient. Second, under such a plan we evade a community responsibility to provide nurses for the future need of the community, and also deprive young women of the community who might be desirous of becoming nurses.

Nursing may be considered an essential community service, not only from the standpoint of economics, but from the standpoint of providing a satisfactory vocation for young women. The community, therefore, has a responsibility to so essential an occupation. Those who are intimately responsible for the conduct of a hospital in any community should see that people accept it. It does not seem just that the sick man, already bur-

*Read before the Alabama Hospital Association, Shocco Springs, Alabama, Oct. 17, 1927.

dened from an economic standpoint because of his sickness, should have to bear the major support of the education of young women in the community, in this specialized field. Neither does it seem just that such an essential community service should be provided in the way of cheap labor by the student nurse.

Our communities assume responsibility in the general educational field, and the right of public funds for the maintenance of public schools is no longer debatable. Public funds have also largely been used for the education of the essential trades and in the education of teachers, who may also be considered public servants. Why should they not be as readily available for the preparation of nurses?

Perhaps the reason that this has not been more readily provided from public funds has been that both the medical and nursing professions have held themselves and their institutions apart from the community. The hospital itself has usually been set on the outskirts of the town, with open spaces surrounding it, as though it were a thing apart.

The sources of hospital revenue have usually been derived from private patients; from an assumption by the community, either public or private, for a few indigent cases, and the balance of support has come from the potential incomes of doctors.

In the education of the nurse, the major part of the investment of teaching facilities have come from the personal resources of the superintendent of nurses. A service so essential to the whole community should not burden the individual doctor and the individual nurse who happen to be the ones actually responsible for the conduct of the institution.

In the successful operation of a small hospital with a school of nursing which meets the health demands of the present day, an all round education of the student nurse is necessary.

Perhaps the first and most important consideration is the governing body. Usually there is a board of trustees or a board of control responsible for the institution, but there should be in addition to this a committee charged with the responsibility of developing the school of nursing. I would suggest a committee of from seven to nine. If there are as many as six physicians in the community who

are on the hospital staff, two physicians might serve at a time for one year only. In this way, all of the physicians might in the period of one student's training become thoroughly familiar with the institution, and feel a responsibility for the school.

Next in order of importance would be the superintendent of nurses or the director of the school. It is very difficult where the duties of the superintendent of the hospital and the superintendent of nurses are vested in one person, because as superintendent of the hospital she is constantly concerned with the economic side of the ledger in making the hospital as near self-supporting as possible. As superintendent of nurses she is constantly concerned with developing the educational opportunity of the students. Even where the duties of the superintendent of the hospital and the superintendent of training school are not vested in one person, if at all possible an assistant should be provided, from the standpoint of the division of time alone.

After the facilities for administration have been provided, the next thing is to choose the student wisely. In the small community this is more important than in the larger cities, where the student body is drawn from a wider area. In the small community the hospital is known intimately to the people, and its personnel, therefore, is of vital importance. In order to command the resources of local institutions the students should be drawn from the best families in the community. This is one of the main reasons why a high educational entrance requirement should be encouraged. It is easier to assimilate students with two or three years of high school education, and high school graduates, than if students with less than high school education are accepted. It goes without saying that the respect of the student herself for her institution is essential to her own development.

In order to meet the demands of service in the large hospital, the small hospital must send its nurses for affiliation if it is to equip its students for service in them, and with such affiliations the student from the small hospital may take her place in the best equipped and largest institution with no feeling of inferiority, if her general education, the curriculum in her own school and the ad-

ditional practice of the large institution have all been of standard quality.

In order to maintain the curriculum in the small school, it will undoubtedly be necessary to secure additional sources of instruction in the community. If there is a college, additional courses in science, nutrition, etc., can be arranged. If not, perhaps there is a normal school. If neither of these are available, I should as an emergency fall back on the high school, though there is the danger of losing the respect of the student nurse who has already completed her high school course in securing the instruction from this source, and I should make it quite plain to students that it was an emergency measure because in the community it was necessary to maintain the institution for the benefit of the sick, and until additional financial resources of the school itself could provide instruction in these subjects, it was better to secure the instruction from the high school than to lose the advantages entirely.

The recreational side of the student is another problem for the small hospital school of nursing, and in order that this might be provided in the best way, it seems an auxiliary or a service league of some kind should be organized, which might have committees of various types—one to deal with the social side of the student nurse, another to deal with advantages in the community for cultural improvement, etc., etc.

Even the service of the hospital might be increased by a committee on assistance in the linen room and the preparation of surgical dressings. Through the intelligent direction of such an organization, the superintendent of nurses might be relieved of many of the duties she now assumes, and freed to make available other community resources. Through the auxiliary or service league the superintendent of nurses would also find great assistance in recruiting students.

In the last analysis, the small hospital which meets the needs of the community in the efficient care of the sick, in the standard education of the student and in developing community resources to assume financial and service responsibility, is the ideal one!

SOME POINTS ON THE DIAGNOSIS AND TREATMENT OF PULMONARY TUBERCULOSIS

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DIAGNOSIS

The earlier a diagnosis of tuberculosis is made, the more favorable the outcome in most cases. However, the diagnosis is more difficult in incipient than in the later stages. In view of these facts most of this discussion will be limited to the first stage, followed by roentgenograms of normal and the several stages of tuberculous lungs. The tendency is toward recovery from most diseases, particularly pulmonary tuberculosis. This statement is supported at post-mortems by pathologists who find evidence of this disease in nine out of ten subjects. The physician may materially aid at home wherever that may be. It is no doubt true that a high, dry climate is more favorable toward recovery when all other things are equal, but there are other things to be considered of greater importance, namely: early diagnosis and expense.

If the physician realizes that he can treat successfully the vast majority of these patients at home then he will naturally take more interest in this matter and find incipient cases which he is at present overlooking, and these are the cases which he can do most good. The average physician has too long felt that he has done his duty when he has found a patient suffering of tuberculosis and hurried him off somewhere. Most of them are far advanced and well nigh hopeless. On the other hand, a diagnosis made months or years earlier and home treatment instituted most likely would have aided in prompt improvement and ultimate recovery.

Every physician, whether he be general practitioner or limiting his work to some specialty, should carry in his mind at all times the importance of early diagnosis and treatment of tuberculosis. There has been so much said in recent years on "focal infection" until incipient tuberculosis is too frequently allowed to become moderately advanced or far advanced while awaiting improvement follow-

ing tonsillectomy or removal of carious teeth. If the tonsils and teeth need removal and there are symptoms of fever, loss of weight, general weakness, etc., by all means make a careful physical examination so that choice of the anæsthetic and after care may give a more enlightened and also more favorable prognosis.

Viewed from an economic standpoint, only a small per cent can afford to leave home, friends and other ties without worrying or having some other member of the family doing so. It may be the breadwinner, the mother or a child in a home where there is already difficulty enough in meeting obligations. Patients are generally advised to remain the balance of their lives in the climate where they are treated, so this means a permanent removal if sent away for treatment.

Never attempt a chest examination through any clothing for it is unfair to both the patient and the physician. Enough mistakes will be made without this one as a foundation. The usual methods of inspection, palpation, percussion, auscultation and the X-ray should be followed in order unless hemoptysis is a recent symptom when percussion and deep breathing should not be allowed under forty-eight hours after hemorrhage. Since most infections begin in the apices, most time should be spent searching for retraction, dullness, change in breath sounds or rales in these regions. Fine, crackling rales at the apex which are persistent with and without cough are significant. The bases are the next most frequent points of entrance. The writer once heard a famous clinician and teacher say that ninety-nine per cent of phthisis begins in the apices and the other one per cent in the base, thus emphasizing the importance of spending most time searching in these areas.

In the early stages of pulmonary tuberculosis physical signs may be absent in the chest, but vague symptoms of indigestion, loss of weight, slight fever, hoarseness and hemoptysis are sufficient to lead to a diagnosis. Cough may or may not be an early symptom, for one patient may show definite physical signs and even tubercle bacilli in the sputum without much cough, while another may be annoyed for weeks by a cough as the only symptom. Some patients look perfectly well, others

have "phthisical chest," while still others present sallow, emaciated figures of classical description depending on the stage of advancement.

Tuberculosis begins in the right apex more often than in the left. The apex corresponds anatomically to the inner portion of the supraspinous fossa, the so-called "alarm zone," which may be described as a point midway between the spinous process of the seventh cervical vertebra and the projecting inner tubercle of the spine of the scapula. At this point there is less intervening soft tissue and is therefore the point of election for careful examination of the apex for incipient tuberculosis. After listening during quiet breathing over the apices, above and below the clavicles in front, and above the spine of the scapula behind, the patient should be directed to breathe out and then, at the end of expiration, to cough, followed by deep inspiration when rales may be found that might otherwise be overlooked.

Without going into too much detail the writer wishes to emphasize the importance of percussion. It is of great aid and not difficult when practised regularly. When uncertain about this art try the hammer and pleximeter which is a simple and satisfactory method, preferred by some authorities to the fingers. It is so easy to get into the habit of hurrying in and placing the stethoscope here and there for a few moments and hurrying away without using the art of percussion, thus gradually forgetting this important aid in diagnosis.

Laboratory and X-ray examinations are of distinct aid but are not intended to replace physical diagnosis. Too frequently there has been a feeling of duty well done when a negative report is secured from a laboratory. This is splendid provided it supplements and not replaces a careful physical examination. X-ray machines have become so simplified in control and operation and prices so reasonable until the community that has not ready access to this means of diagnosis is no longer fairly treated by the medical profession. The argument may be presented that it is difficult and should be in the hands of trained workers in this particular field. This is true in

PUBLIC HEALTH FROM A BUSINESS MAN'S STANDPOINT*

W. M. MIZELL, JR.*

Folkston, Ga.

Mr. Chairman, Ladies and Gentlemen:

There runs a story of a young man who called on a banker for a loan. After the young man had thoroughly and painfully gone into the details as to why he needed this loan, the banker said, "Now if you can tell me which one of my eyes is glass, I will make you the loan." The young man looked at the banker a few moments and hesitatingly said, "Mr. Jones, it is the left eye." "But," said Mr. Jones, "Why do you say the left eye?" "Because," replied the young man, "It looks a little more sympathetic than the other one."

Now, Ladies and Gentlemen, I hope that you will not feel that you will have to listen to a dry speech filled with facts and figures from a banker and that it will lack the most appreciated phase of life, sympathy.

The Ellis Health Law as I understand it, should appeal to us from a great many angles, not only from the fact that if it were put into effect it would give us a healthier community, but it would increase our riches a hundred fold, and it is of riches I wish to speak, for who is so self-satisfied as not to care for riches. "If any speak, for him have I offended."

We are today citizens of a country, the richest the world has ever known. We have within our boundaries states as large as kingdoms of the earth, which united together make the greatest Democracy ever conceived by man.

In 1513, Juan Ponce De Leon, a Soldier of Fortune from the Court of Spain, landed upon the shores of our Sister State and gazing in rapture upon its beautiful foliage of vines hanging in graceful festoons from the trees upon its shores intermingled with palms, and bewildered by the perfumes of many flowers, he called it Florida, "The Land of Flowers." As he investigated that wonderful country

with its virgin forests, hills and meadows, gorgeous in its profusion of color, his senses became enthralled. An old Indian told him of a wonderful stream, whose magic waters would restore to him eternal youth. He at once began the age long search for his Eldorado, the Utopia of our dreams, which grows stronger and stronger within us as the crows feet of time interlink their traces beneath our eyes. We have learned since then that the fountain of youth is not an external force, but that it springs from within; that bodies properly cared for and minds well balanced, possess in a measure a fountain of youth, and to those of us who realize that this fountain springs eternally within us, we have been given a knowledge that can not be measured in dollars and cents.

It is here that I wish to emphasize the Ellis Health Law. No child suffering from hook worm disease, who is ill nourished or carrying in his system a malignant disease, can use his intellect to its greatest advantage. Yet we, as taxpayers, spend the same amount of money, through our present school system, on the sickly child to educate it as we spend on the one in good health. Many a time the little scrawny, pinched face child is called upon to do the same exercises and solve the same problems as his healthy classmate. Yet the brain cells are unequally nourished. How we waste our money, when all the wealth of these little minds could be made useful to us in later years, if they were properly nourished and cared for now!

The best place to find out about the physical condition of children is in school, or on the school grounds. A healthy, robust child will play. It is natural that he should do so. Teachers can make a close study of children as to their habits, while they are on the school grounds and defects that show up should be reported to the County Physician; for we must remember that they are being educated at the expense of the State and we, as taxpayers, have a right to demand a close physical inspection and that the defects of childhood be corrected before they become chronic, in so far as possible. The State in years to come will demand from them a recompense for what they are receiving now.

Will these little ones point an accusing fin-

*Cashier and Director of The Citizens Bank of Folkston, Ga.

*Read before the meeting of the Eleventh District Medical Society, Folkston, Ga., Oct. 18, 1927.

ger at us and say that we have failed in our duty toward them? We, the citizens of Charlton County, have placed on the boundary line of this County, between it and Florida, miles and miles of wire fence to keep back some tick bitten cow or calf that this State may be free from ticks, in order to guard the health of scrub cattle. In addition to this, men have been employed to ride the fences and run up and down the river in motor boats to keep infected cattle out. But, have we ever employed a competent man to go out and ascertain the physical condition of our children? Have we ever placed at the bedside of those mothers a competent nurse to see that the littles ones ushered into this world have an equal chance with a cow or a calf? Has this thing we call human life become so cheap that it is not worth our thoughtful consideration? Shall we spend our money to dip a calf, when a baby is not worth the washing?

Would it not be to the credit of the Eleventh District Medical Association that they insist upon school children receiving a close physical inspection and all means brought to bear upon our governing bodies, that the school children be fitted physically to take advantage of the educational training offered them, that in after years they be better qualified to carry on the duties of citizenship?

Are the armies of the world to only receive the flower of our manhood, and the weakling not to be considered worthy of being shot? Where is the civilization of which we so proudly boast? When will the world wake up to the fact that children are entitled to the first consideration at the hands of the government, and that these governments should look to their physical requirements and not demand as a recompense that they be riddled by bullets or pierced by the bayonet's thrust?

Are we to accept forever the theories handed down from father to son until we take for granted that wisdom only walks with a walking stick? We are creatures of custom, and forty years ago fashion decreed its dirt-dauber waist for women; a fanatical religion of India had its river Ganges; the deformed foot of an empress became the custom of torture for Chinese children; and you, gentlemen of the medical profession, no doubt, have experienced how ignorance in a community

can block the progress you are trying to make, and discourage you in your best efforts.

If I have spoken an unwelcome truth, may it vibrate in your minds until it bears its fruits in a broader conception of the true destiny of man and evolve for posterity a higher civilization.

Gentlemen, we are wasteful of the finer things of life. We are depreciating the wealth of our community and letting go to waste our best assets. Who can say but what there is locked up in the minds of some of these little neglected children the secret of the ages. The answer to the riddle of the Sphinx, a designer greater than he of the hanging gardens of Babylon or that dream in marble, the Taj Mahal:

"For the best verse hasn't been rhymed yet;
The best house hasn't been planned;
The highest peak hasn't been climbed yet;
The mightiest rivers aren't spanned."

There gathered in the Courts of Heaven once, before the Master of all designers, his angels. He said to them, "I am going to place in the world below a child. I am going to ordain that he shall have the gift of oratory. That with words he shall paint the beautiful immortal scenes of Heaven in crimson and gold and carry to the world below the music of the spheres. That thousands will listen entranced to the magic of his words, to go forth into the world to live lives of usefulness. That through his persuasion and eloquence the sword shall be beat into plowshare and the spear into pruning hooks. And war shall be no more. Through his influence men shall be made to realize that they were created in My image, and from the ice caps of the North pole to the confines of the South, peace and harmony shall reign supreme and races shall dwell together in unity and sweet accord." "But," said the Great Designer, "I am going to place this intellect in a frail and delicate body that I may ascertain if the world has advanced enough to nurture such a spirit, and receive it." Down like a shaft of light, a sunbeam from Heaven, in an humble home on the hill side came the wee little mite. Blissful ignorance of the laws of sanitation wrapped it in its mantle. The well stood in the hollow of the hill where it was easiest to dig

THE JOURNAL

OF THE
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Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

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Articles are accepted for publication on condition that they are contributed solely to this Journal.

Manuscripts should be typewritten, double-spaced, and the original (not the carbon copy) submitted. Used manuscript is not returned unless requested.

Communications and items of general interest to the profession are invited from all parts of the State. We especially invite county society secretaries to send us information of happenings in the county that would be of interest to the members throughout the State.

Reprints should be ordered within 30 days after the appearance of an article, since all type will be destroyed at the end of that time.

Editorial Department

TUBERCULOUS CHILDREN'S COTTAGE AT ALTO

The Masons of Georgia are proceeding with plans for the erection of the children's cottage at the State Tuberculosis Sanatorium at Alto. Dr. E. C. Thrash, Atlanta, has been appointed State Director for the completion of the campaign to raise the necessary funds. To assist him in the work, Dr. Thrash will have a District Director for each Congressional District and these in turn County Directors in every county. The duties of the County Directors will be to deal with all civic and Masonic organizations in their respective counties. The Governor, Dr. L. G. Hardman, and the State Superintendent of Schools are planning to get the co-operation of every public school in Georgia so that each child may contribute a small amount to this worthy enterprise. Plans are being outlined to see every Mason in the state personally and give each one an opportunity to contribute. The Parent-Teacher Associations and all civic bodies will be called upon for assistance. The State Director, Dr. Thrash, earnestly requests that every member of the association assist by making talks before all local organizations.



DR. WILLIAM R. BATHURST
LITTLE ROCK, ARK.

President, Southern Medical Association

At the recent annual meeting of the Southern Medical Association at Memphis, Tenn., Dr. William R. Bathurst of Little Rock, Ark., was unanimously elected president for the year 1927-1928. The election of Dr. Bathurst came as a well deserved reward for the service he has rendered medical organization in the South. Since 1912 he has been Editor of the Journal of the Arkansas Medical Society and since 1919 Secretary as well, having been re-elected each year without opposition. In those positions he has labored unremittingly for the upbuilding of the Arkansas profession and has been the single greatest factor in the present high standing and solidarity of the physicians of his home state. Likewise he did yeoman service for the Southern Medical Association at a time when it needed help most. He served it for eight years as Councilor from Arkansas and one year as Chairman of the Council.

Dr. Bathurst is Professor of Dermatology in the School of Medicine of the University of Arkansas and a Fellow of the American

College of Physicians. In addition to caring for an extensive private practice in his chosen field he takes an active part in the civic and social affairs of his home city. For many years he has been a prominent member of the House of Delegates of the American Medical Association.

We predict the most successful year in the history of the Southern Medical Association under his wise leadership.

HYPERTENSION OF THE PULMONARY CIRCULATION

Moschowitz, Eli. Hypertension of the pulmonary circulation. Its causes, dynamics and relation to other circulatory states. *Amer. Jour. Med. Sciences.* 174 (3): 388-406. 7 fig. 1927.—The author discusses the circumstances under which hypertension of the pulmonary circulation occurs, the circulatory dynamics involved, the clinical recognition of the disease entity, and its relation to other circulatory states. Hypertension of the lesser circulation passes generally under the name of "pulmonary congestion" and "right-sided insufficiency," or "arteriosclerosis of the pulmonary vessels." Any lesion that increases the peripheral resistance within the pulmonic circuit will bring about this condition.

The most common causes are mitral disease, especially mitral stenosis, empyema, whether primary (senile) or secondary (asthmatic), infiltrating lesions of the lung, kyphoscoliosis, patent ductus arteriosus and communications between the two sides of the heart. Long continued hypertension of the lesser circulation leads to arteriosclerosis of the pulmonary vessels. This arteriosclerosis is independent of that which may occur in the greater circulation. The chief physical signs observable are: Increased venous pressure, accentuation of the second pulmonic sound, dilatation and hypertrophy of the right heart, dilatation of the pulmonary conus, cyanosis, dilatation of the pectoral and other superficial veins, enlargement and tenderness of the liver, lowered kidney function, and infarction of the lungs.

The so-called "Ayerza's disease" is not a disease, but a syndrome developing from any lesion that causes hypertension and consequent arteriosclerosis of the pulmonic vessels.

The constant relation of syphilis to this disease is not proven. There is a likelihood that cirrhosis of the liver associated with cardiac disease is the result of the increased venous tension within the hepatic area and of an hepatic arteriocapillary fibrosis. Hypertension of the lesser circulation may be the mechanism of the cyanosis seen in congenital heart disease.

BACHMANN.

VACCINATION SHIELDS AND TETANUS

Armstrong* has collected ninety-eight cases of post-vaccination tetanus which have occurred in this country during the past several years. All of these cases had some form of shield or dressing applied over the vaccination area. The type of dressing used in these 98 cases was as follows: 44 had shields applied; 32, gauze; 15, bunion pads; 4, gauze and shield; 2, no dressing early, shields later; 1, adhesive bandage. Not a single case of tetanus was discovered where no dressing was used. This report should outlaw the vaccination shield forever, likewise all other forms of dressings.

He gives the following advice regarding vaccination: (1) *Dressings.* No local covering should be applied by physician. Warn patients and their families about the dangers of home-applied shields and dressings. (2) *Insertion.* The insertion should be small, never more than one-eighth inch in its greatest diameter. (Get Reprint No. 1137 from Surgeon General, U. S. Pub. Health Service, Washington, on "Questions and Answers on Smallpox Vaccination.") (3) *Method of Cleansing Skin.* Gentleness is more important than the solution used. (4) *Site.* The insertion of the deltoid is the best location. (5) *Age.* Vaccinate all children during the first year of life. The reaction is less and there is the added protection during childhood. Don't delay until it is time for the child to enter school since there is then much more danger of contamination of the wound and hence greater danger of tetanus.

*Armstrong, Charles (1927): Tetanus Following Vaccination Against Smallpox, and its Prevention. *Pub. Health Rep.*, Vol. 42, No. 50, pp. 3061-3071.

EARLY DIAGNOSIS OF TUBERCULOSIS—A NATION-WIDE CAMPAIGN

During March, 1928, tuberculosis and health associations of the United States, led by the National Tuberculosis Association, will conduct an intensive publicity campaign to emphasize the importance of the early diagnosis of tuberculosis.

The aim of the campaign is two fold, first to focus the attention of the public at large upon the danger signs of early tuberculosis and to urge them to go to their doctor for examination; and second, to stimulate renewed interest on the part of the medical profession in the recognition of early signs of tuberculosis.

The American Public Health Association, at its annual meeting held in Cincinnati, October, 1927, endorsed by resolution the plan of the campaign and offered to lend assistance to the movement. The American Medical Association has agreed to stimulate the interest of the medical profession through its Journal and to interest the lay public by publishing articles and editorials on the subject in *Hygeia*.

At a meeting of the Directors of the Georgia Tuberculosis Association in Atlanta on November 4th, the plan of the campaign was outlined and approved, and the Managing Director authorized to proceed to launch the campaign in Georgia as effectively as possible, securing the co-operation of the State and all local medical associations as well as the local tuberculosis associations and committees. An advisory medical committee was authorized by the directors of the association. The entire program was submitted to this committee and was given its unqualified approval.

The intensive program during March will be largely a poster campaign. Billboards are to be extensively used and other posters of various sizes for window and counter display. The texts of these posters have been carefully scrutinized by a committee of the National Tuberculosis Association and competent authorities of the American Medical Association.

In addition to the posters, many folders and pamphlets will be distributed and a number of films secured suitable for use by both lay and medical groups. The title of the film for lay groups is "Let Your Doctor Decide;" and for medical groups, "The Doctor Decides." The plan also provides for a wide range of newspaper publicity, radio talks, and special programs before medical and lay audiences.

DIAGNOSTIC STANDARDS OF TUBERCULOSIS

In 1917 a Committee on Diagnostic Standards, organized by the National Tuberculosis Association, set to work to formulate as simply and accurately as possible standards and criteria for the diagnosis of tuberculosis. The seventh edition of *Diagnostic Standards for Pulmonary and Glandular (Hilum) tuberculosis* was published November, 1926, in booklet form by the committee.

Minimum standards in the diagnosis of pulmonary tuberculosis are listed as follows:

When constitutional symptoms and definite past history are absent or slight, there should be demanded definite signs in the lungs, including persistent rales usually in the upper half of the lung, or definite and characteristic parenchymal changes as shown by the X-ray, or the finding of tubercle bacilli. (By "persistent" is meant that the rales must be present after cough at two or more examinations, the patient having been under observation at least one month).

2. In the presence of constitutional symptoms, such as loss of weight and strength, etc., as defined above, there should be demanded some abnormality in the lungs on physical or X-ray examination or both (but not necessarily rales.)

3. Usually a process in the upper half of the chest should be considered tuberculous and a process in the lower half non-tuberculous, until the contrary is proved.

4. Hemoptysis or pleurisy with effusion is only presumptive evidence of the disease.

5. Pain in the chest and shoulders, night-sweats, digestive disorders, etc., require careful examination of the lungs for evidence of the disease. The presence of any extra pulmonary tuberculous lesion necessitates careful examination of the lungs. This includes especially fistula in ano, adenitis, joint tuberculosis, etc.

6. In every doubtful case one should demand that the patient be kept under observation and a record kept of pulse, temperature, weight, etc., for at least one month, with repeated sputum examinations, before a definite diagnosis is made. The importance of careful and thorough observation for at least one month is to be emphasized.

7. Tuberculin tests and other special laboratory diagnostic methods are of use only when in the hands of those specially trained and experienced in their interpretation.

The booklet also includes precise definitions of symptoms commonly encountered, classifications of diagnosis according to lesion and recommendations for the disposition of patients according to stage of disease. "Diagnostic Standards" may be obtained free from the Georgia Tuberculosis Association, 4 Capitol Square, S.W., Atlanta, Ga.

VARIATION IN OPERATIVE TREATMENT OF STRUCTURAL SCLIOSIS

Patients suffering from the severest forms of paralytic scoliosis, or from scoliosis from any cause are in poor constitutional condition and likely before middle age to be victims of intercurrent disease, according to Armitage Whitman, New York (*Journal A. M. A.*, Dec. 24, 1927). Any ambulatory apparatus thus far devised if comfortable is ineffective, and if effective is uncomfortable. Because of the anatomic peculiarities of this type of case, the routine Hibbs operation is impossible of performance. Resection of a certain number of protruding ribs has improved the patient's appearance, and appears to have a favorable influence on the deformity of the chest and secondarily on pulmonary ventilation. The employment of the resected portion of the ribs as homogeneous bone grafts has proved a useful adjunct to the ordinary operation. The post-operative constitutional improvement has justified the unusual risk of the operation.

District and County Societies

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1927 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 20, 1927.
2. Turner County, Dr. J. H. Baxter, Ashburn, November 15, 1927.
3. Terrell County, Dr. Logan Thomas, Dawson, December 1, 1927.
4. Pike County, Dr. M. M. Head, Zebulon, December 3, 1927.
5. Ben Hill County, Dr. L. S. Osborne, Fitzgerald, December 8, 1927.
6. Evans County, Dr. S. T. Ellis, Claxton, December 29, 1927.
7. Jasper County, Dr. E. M. Lancaster, Shady Dale, January 6, 1928.

COUNTIES REPORTING FOR 1928

BEN HILL COUNTY MEDICAL SOCIETY

Ben Hill County Medical Society announces the following officers for 1928:

President—J. L. Frazer, Fitzgerald.
Vice-President—Frank Ward, Fitzgerald.
Secretary-Treasurer—L. S. Osborne, Fitzgerald.
Delegate—W. P. Coffee, Fitzgerald.

CLAYTON-FAYETTE COUNTIES MEDICAL SOCIETY

Clayton-Fayette Counties Medical Society announces the following officers for 1928:

President—G. W. Wallis, Fayetteville.

Vice-President—T. C. Cannon, Jonesboro.

Secretary-Treasurer—H. D. Kemper, Jonesboro.

DOUGHERTY COUNTY MEDICAL SOCIETY

Dougherty County Medical Society announces the following officers for 1928:

President—A. S. Bacon, Albany.
Vice-President—F. K. Neil, Albany.
Secretary-Treasurer—I. M. Lucas, Albany.
Delegate—W. L. Davis, Albany.

HABERSHAM COUNTY MEDICAL SOCIETY

Habersham County Medical Society announces the following officers for 1928:

President—J. H. McClure, Cornelia.
Vice-President—W. H. Garrison, Clarkesville.
Secretary-Treasurer—R. B. Lamb, Demorest.
Delegate—W. H. Garrison, Clarkesville.

HALL COUNTY MEDICAL SOCIETY

Hall County Medical Society announces the following officers for 1928:

President—J. K. Burns, Gainesville.
Vice-President—H. K. Phillips, Helen.
Secretary-Treasurer—Pratt Cheek, Gainesville.
Delegate—J. H. Downey, Gainesville.

RANDOLPH COUNTY MEDICAL SOCIETY

Randolph County Medical Society announces the following officers for 1928:

President—F. D. Patterson, Cuthbert.
Vice-President—E. C. McCurdy, Shellman.
Secretary-Treasurer—G. Y. Moore, Cuthbert.

STEWART-WEBSTER COUNTIES MEDICAL SOCIETY

Stewart-Webster Counties Medical Society an-

announces the following officers for 1928:

President—R. L. Grier, Lumpkin.

Vice-President—C. E. Pickett, Richland.

Secretary-Treasurer—J. M. Kenyon, Richland.

Delegate—J. M. Kenyon, Richland.

SUMTER COUNTY MEDICAL SOCIETY

Sumter County Medical Society announces the following officers for 1928:

President—Herschel A. Smith, Americus.

Vice-President—J. C. Logan, Plains.

Secretary-Treasurer—Henry A. Smith, Americus.

Delegate—B. T. Wise, Plains.

TIFT COUNTY MEDICAL SOCIETY

Tift County Medical Society announces the following officers for 1928:

President—D. B. Harrell, Tifton.

Vice-President—J. M. Price, Tifton.

Secretary-Treasurer—C. S. Pittman, Tifton.

TURNER COUNTY MEDICAL SOCIETY

Turner County Medical Society announces the following officers for 1928:

President—R. D. Rawlings, Rebecca.

Vice-President—J. F. Covington, Ashburn.

Secretary-Treasurer—J. H. Baxter, Ashburn.

WARE COUNTY MEDICAL SOCIETY

Ware County Medical Society announces the following officers for 1928:

President—C. M. Stephens, Waycross.

Vice-President—H. G. Huey, Homerville.

Secretary-Treasurer—Kenneth McCullough, Waycross.

Delegate—W. F. Reavis, Waycross.

COMMUNICATIONS

To the Editor:

Don't your readers get "fed up" on purely scientific (?) (How careless we are in the use of words!) articles? Why not hold a contest on, "My Greatest Bird Hunt" or, "The Best Alibi for a Night Out" (This pestiferous auxiliary is "getting on to" all our old alibis.) Limit essays to 100 words and omit, on request, author's names. Give as first prize, "a-self-service-hair-cutting-outfit;" second prize, "an-all-night's-pants-presser;" and, as third prize, "an-automatic-shoe-shiner."

How did you like "Sorrell & Son?" The "boss" and I thought it the best novel we read during 1927. What are the points of similarity between "Batouala" and "Black April." To me the former is "pig iron" and the latter "a plantation melody." Do you think Benj. Franklin's autobiography might be called "The Making of a Man" and Cushing's Life of Osler, "The Making of a Doctor?"

Please have Council petition Henry, now that he has perfected the new Ford, to devise a method whereby we may furnish the "wherewith all" to the "missus and kids" by practicing two hours per day and have the spare time for dominoes.

A. HAMILTON, M.D.

P. S.—Use your influence to have Dr. Sydenstricker and his committee on Scientific Work pro-

vide a "Checkers Tournament" at the Savannah meeting. It will stimulate attendance and increase membership.

To the Editor:

At the American Gynecological Society meeting last May, several members, representing large hospitals, spoke in strong denunciating tones regarding the present training of nurses, among them was Dr. Williams of Johns Hopkins. He spoke in terms to this effect that the teaching of nurses had been left very much, or entirely, to women but they now realize the curriculum has reached the point where they are endeavoring to teach college women nursing and to teach them too much about medicine and other things they do not need in their work. It is burdensome to them and interferes with the practical training nurses should have, and that they (Hopkins) were planning active measures to correct the trouble.

Several such speakers representing large hospitals in New York, Brooklyn, Chicago and other places spoke along similar lines and a committee was appointed to rewrite the curriculum for schools of nursing.

Dr. Franklin H. Martin of the American College of Surgeons then requested this committee to co-operate with a committee from the American College of Surgeons who were charged with care of investigating and putting into effect measures controlling training schools for nurses with a view of eliminating such features as mentioned by Dr. Williams. That is, needless theoretical and high training in medicine and the neglect of practical training in nursing.

I may add, a number of hospitals and institutions are corroborating with the American College of Surgeons in adjusting the matter of teaching nurses, and they have sent out circular letters to various hospitals for information along these lines.

A MEMBER.

P. S.—The percentage of high school girls taking up nursing is not sufficient to replace the present shortage of nurses.

To the Editor:

The November issue of the Journal of The Medical Association of Georgia carries an article that to our minds is one of the boldest acts of plagiarism we have ever seen attempted. The entire article is copied verbatim from a very well known work and as such is a reflection on the intelligence of the Medical Profession of Georgia as well as upon the Editorial Staff of the Journal.

We feel that this matter should be investigated by the proper authorities of the Association and their findings and actions be given free publicity in the Journal.

Trusting that you will give this matter your serious attention.

Signature on file in Journal office.

THE CALHOUN LECTURESHIP

To the Editor:

I am inclosing a list of the members of the Medical Association and friends who have contributed to the Abner Welborn Calhoun lectureship. Won't you please publish this list and thank all of the members for their contribution?

Contributions are coming in slowly but we are in hopes that the members, after the Christmas holidays, will contribute more freely to this fund. The cause is a most worthy one.

A lecturer has already been secured for the next meeting of the State Association, the expenses to be paid by one of our loyal members without drawing on the interest of this fund. Please allow me to again appeal for the support of all of our members.

J. E. PAULLIN, M.D.

List of the subscribers follow:

| | |
|------------------------------|---------------------|
| Adair, R. E. | Kay, J. B. |
| Avary, Arch | Kemp, W. M. |
| Ballenger, E. G. | Kennedy, Herbert |
| Benson, W. E. | Klugh, G. F. |
| Bloek, E. Bates | Landham, J. W. |
| Bunec, A. H. | Lee, Lawrence |
| Calhoun, Mrs. A. W. | Lester, J. E. |
| Calhoun, F. P. | Lindley, F. P. |
| Clifton, Ben H. | McDougal, W. L. |
| Crawford, H. C. | Nolan, C. T. |
| Crock, W. W. | Oglesby, Mrs. S. C. |
| Dickson, Roger, W. | Pace, W. T. |
| Donohue, C. A. | Paullin, J. E. |
| Dowman, C. E. | Perkinson, W. H. |
| Edgerton, M. T., Jr. | Pitman, J. F. |
| Elkin, W. S. | Roberts, M. Hines |
| Fanning, O. O. | Rogers, T. E. |
| Forrer, D. Atwell | Sauls, H. C. |
| Fowler, R. W. | Sharp, C. K. |
| Garrett, L. G. | Slack, H. R. |
| Gober, W. M. | Smith, Arch |
| Goodwyn, H. J. | Thompson, C. |
| Grove, L. W. | Todd, R. W. |
| Hailey, W. H. | Welch, L. L. |
| Harrison, M. T. | White, A. F. |
| Haygood, G. F. | Wise, B. T. |
| Johnson, Trimble | Young, W. W. |
| Witham, Mrs. Harriet Calhoun | |

PULMONARY TUBERCULOSIS

(Continued from page 33)

some phases but for the most part it is like any other means of assistance, the more it is used the more simple it becomes.

TREATMENT

Treatment consists of rest, food, fresh air and sunshine. Patients should be exposed to the direct sun rays or actinic rays from a quartz mercury light which seems to be of undoubted benefit. Centuries ago a physician became famous for his advice to a young man

who had developed pulmonary tuberculosis; said advice was to take a cow and go up the mountain. This merely emphasizes the simplicity of treatment which any layman can tell you consists of wholesome foods, rest and fresh air. The one great advancement today over former days is along the line of prevention. Not only the physicians, but preachers, teachers, welfare workers and writers are stressing the importance of keeping physically fit and thus avoiding diseases. The incidence of tuberculous disease is decreased in proportion to raising of health conditions in a given community.

The best results in treatment come through the application of a definite program. In other words, never allow the patient to exercise the slightest choice in carrying out a schedule. This means that directions must be written covering every hour of the day, beginning with the hour to arise, food to eat, hours to sit out of doors, hours to lie down, exercise and time to retire. The physician is greatly benefited by this program for he gives definite instructions and ceases to issue vague, verbal orders, such as: "Take a little exercise," "rest a lot and take plenty of food," "never get tired," "see that the bowels move daily," etc. This is about as important as a diabetic weighing his food and counting his calories. Exercise is not a part of treatment as long as the case is active and should be grudgingly allowed when an apparent necessity. The problem of feeding is similar to that in other infections, but longer drawn out. Milk and eggs are not the only foods that may be used but are the foundation in feeding most cases. Age, sex and occupation are to be considered when feeding a patient. The total number of calories a day will vary generally from two to four thousand, divided into three meals. While there is no specific drug treatment they are sometimes of great benefit in treating cough, hemorrhage, pharyngitis, laryngitis, coryza, bronchitis, etc., all too well known to require further discussion.

SUMMARY

The majority of tuberculous patients recover at home. Through more interest and study physicians can aid an even greater number to regain their health. The earlier the diagnosis the more favorable the outcome.

Georgia State Association of Graduate Nurses

OFFICERS

| | | | |
|-------------------------|----------------------------------|-------------------------|---------------------------------|
| President..... | Miss Annie Bess Feebeck, R.N. | | |
| | Grady Memorial Hospital, Atlanta | | |
| 1st Vice-President..... | Miss E. Alma Brown, R.N. | 2nd Vice-President..... | Miss Jessie Veazey, R.N. |
| | University Hospital, Augusta | | St. Andrews Apt., Atlanta |
| Secretary..... | Mrs. Alma E. Albrecht, R.N. | Treasurer..... | Miss Jane Van De Vrede, R.N. |
| | Georgia Infirmary, Savannah | | 105 Forrest Ave., N.E., Atlanta |

GEORGIA STATE LEAGUE OF NURSING EDUCATION

The first annual meeting of the Georgia State League of Nursing Education was held in Macon, Wednesday morning, November 9th, in conjunction with the convention of the Georgia State Nurses' Association.

Mrs. Eva S. Tupman, president, presided and gave a splendid report of the year's work and an inspiring message. "The ultimate success or failure of nursing education depends upon the comprehension of the truth" said Mrs. Tupman. "We have just begun to tap the arts of nursing. Whatever steps are taken, we must see to it that a high degree of skill is maintained and that the research spirit is born in nursing. As Dr. John S. Finley tells us so well in his book 'The Debt Eternal,' we owe a great debt to the next generation, and nurses like others must discharge this obligation."

Miss Beatrice Short, staff member of the N. O. P. H. N., was a guest of the league, and addressed the members on public health work.

Dr. A. R. Rozar, of Oglethorpe Infirmary, Macon, was the first speaker on the program, which comprised a symposium, "The Small Hospital and School of Nursing." His subject was "The Advantages of the Small Hospital in Training Student Nurses for Service."

Miss Shirley Hamrick, of the Hall-Chaudron Hospital, Cedartown, gave a paper on "The Advantages of Affiliated Courses in the Small School of Nursing."

"The Advantages of Affiliated Students to the Large Hospital School of Nursing" was covered by Miss Annie Bess Feebeck, of Grady Memorial Hospital, Atlanta.

Miss Jane Van DeVrede contributed a paper entitled "Developing the Resources of the Community," after which there was general discussion of the subjects.

Under business, annual reports of officers, minutes and reports of standing committees were given and an election of officers held. Miss Jessie M. Candlish, of Atlanta, was elected vice-president of the State league; Miss Annie Bess Feebeck was re-elected as

secretary, and Miss Lillian Alexander as director. Mrs. Tupman was elected in 1926 to serve two years as president.

PRIVATE DUTY SECTION G. S. N. A.

The Private Duty Section of the Georgia State Nurses' Association convened Wednesday afternoon, November 9th, at 2 o'clock, with Miss Jean Harrell, chairman, presiding and giving a special message. Among the speakers were Miss Luey B. Wright, now of Asheville, N. C., nurse-missionary on furlough from China; Miss Lucia Massee, of Cuthbert, Ga., and Miss Vera Mingledorf, of Savannah, Ga.

Miss Wright gave a very interesting depiction of nursing as she found it in China. Of special interest is the fact that standards there are as high as in America—High School education for entrance into a training school is required, nurses must be registered, and hospitals must bear the seal of the Chinese Board of Examiners, else nurses are not allowed to qualify for registration, according to Miss Wright.

Miss Massee and Miss Mingledorf chose for their subjects "What the Nurses' Registry May Expect of the Nurse," and "What the Nurse May Expect From the Registry," respectively. Discussion of these subjects followed.

An election followed reports of officers and committees, and Miss Harrell was unanimously re-elected as chairman of the section. Mrs. Sue Paille, of Atlanta, was elected as secretary.

S. O. P. H. N.

Thursday morning's session was devoted to the second annual meeting of the State Organization of Public Health Nursing, and in the absence of the president and vice-president was presided over by Miss Lillian Alexander. Miss Carroll Swann, of the State Department of Health served as secretary-treasurer pro tem.

Mrs. Myra Cloudman, director of the Athens Child Health Demonstration, Athens, Ga., addressed the members on Public Health Nursing, illustrating her paper with charts.

Mrs. Frank Schley, of Columbus, talked on the subject of Developing the Cultural Resources of the P. H. N., and Miss Frances Hall, of Elberton, contributed a splendid paper dealing with the study of special Psychiatric Clinic problems.

Miss Rhoda Kaufman, Executive Secretary of the State Department of Public Welfare, pleaded for the closest of co-operation between that department and the public health nurses.

The program was followed by reports of officers and committees, and the following officers were elected to serve the coming year: Miss Louise Hazlehurst, of Macon, president; Mrs. Estella C. Westcott, of Savannah, first vice-president; Miss Lillian Alexander, of Atlanta, second vice-president; Miss Carroll Swann, Atlanta, secretary; Mrs. Anne Rivers, of Savannah, treasurer. Miss Beulah Carrington, of Dalton, and Miss Virginia Gibbs, of Marietta were elected as nurse members of the board of directors of the S. O. P. H. N., and Mrs. J. J. Egan of Atlanta, and Mrs. Bruce Carr Jones, of Macon, as non-nurse members of the board.

AMERICAN RED CROSS

An hour between 11:30 and 12:30, Thursday morning, was devoted to the American Red Cross, and was presided over by Miss Jane Van DeVrede, in the absence of Miss Emma Dozier, State chairman.

Miss Ruth Mettinger, special A. R. C. nursing field representative for Georgia and Florida, was the guest of honor and spoke in the interest of present activities of this organization, urging co-operation of the nurses in the 11th annual roll call.

Miss Emma Dozier, chairman of the State committee, was not able to be present, but local reports given indicated continued interest in Red Cross enrollment and the formation of a new local committee was recommended.

Miss Lillian Cumbee, of Atlanta, was selected to succeed Miss Dozier, whose resignation had previously been presented to the national committee, and Miss Cumbee was also chosen as delegate to attend the A. R. C. convention in Washington, December 7th.

BUSINESS SESSION OF THE G. S. N. A.

The last and business session of the G. S. N. A. Convention took place Thursday afternoon, November 10th, at which time new officers for the coming year were elected. Miss Annie Bess Feebeek, of Atlanta, was named president; Miss E. Alma Brown, of Augusta, first vice-president; Miss Jessie Veazey, of Atlanta, second vice-president; Mrs. Alma Albrecht, of Savannah, was again elected to

the office of secretary, and Miss Jane Van DeVrede was re-elected as treasurer. Miss Hattie Wilder, of Macon, is the new counsellor.

Adoption of a motion to empower the executive board of the G. S. N. A. with authority to endorse the official program of the various health agencies of the State in the interest of health education and health activities, as promulgated through the efforts of the Public Information Committee of the Medical Association of Georgia, which met in Atlanta in October, was a feature of the business session.

Other business transacted at this session included nominations for officers of the American Nurses' Association, as recommended by the executive board of the G. S. N. A.; instructions regarding the naming of delegates to the biennial convention of the A. N. A., to be held in Louisville, Ky., next June; and the acceptance of invitation by the G. S. N. A. from the city of Columbus, Ga., to meet there in convention in 1928.

Greetings from a number of state associations and individuals were read at this meeting, and the new officers were given formal introduction.

Report of the resolution committee, expressing appreciation to the members of the Third District organization, to the Macon Chamber of Commerce and to Macon citizens generally for the hearty reception accorded members and delegates and for the splendid manner in which the comfort and pleasure of delegates was cared for, was accepted. This report incorporated the many delightful social features of the convention, including the tea given by the Woman's Auxiliary of the Macon Medical Society of Bibb County, at the home of Dr. and Mrs. John McAfee; a barbecue at Lakeside, where the nurses were guests of the members of the Macon Medical Society of Bibb County, and a banquet at the Hotel Dempsey, followed by a dance.

HEALTH TEACHING

A limited number of reprints of Miss Maud A. Brown's article, *Simplieity in Health Teaching*, published in *Hygeia* for October, 1927, are available. This article presents a selection of first-grade health teaching projects used in the public schools of Fargo, N. D. So long as the supply lasts this pamphlet will be sent free on application to the Child Health Demonstration Committee, 370 Seventh Ave., New York.

Woman's Auxiliary Medical Association of Georgia

OFFICERS

| | | | |
|----------------------|---------------------------------|----------------------|--------------------------------|
| President..... | Mrs. Paul Holliday, Athens | President-Elect..... | Mrs. C. C. Hinton, Macon |
| 1st Vice-Pres..... | Mrs. Marion T. Benson, Atlanta | 2d Vice-Pres..... | Mrs. Wm. R. Dancy, Savannah |
| 3d Vice-Pres..... | Mrs. H. L. Rudolph, Gainesville | Cor. Sec..... | Mrs. Guy O. Whelchel, Athens |
| Rec. Sec..... | Mrs. J. A. Selden, Macon | Treasurer..... | Mrs. Steward D. Brown, Royston |
| Parliamentarian..... | Mrs. James N. Brawner, Atlanta | | |

Delegates to A. M. A.

| | | | |
|-------------------------|---------|---------------------------|--------|
| Mrs. C. W. Roberts..... | Atlanta | Mrs. H. M. Fullilove..... | Athens |
|-------------------------|---------|---------------------------|--------|

Delegates to S. M. A.

| | | | |
|--------------------------|-------------|---------------------------|---------|
| Mrs. T. L. Holcombe..... | Union Point | Mrs. Frank K. Boland..... | Atlanta |
|--------------------------|-------------|---------------------------|---------|

Alternates

| | | | |
|-----------------------|---------|--------------------------|---------|
| Mrs. Dan Y. Sage..... | Atlanta | Mrs. Chas. E. Walts..... | Atlanta |
|-----------------------|---------|--------------------------|---------|

DISTRICT MANAGERS

FIRST DISTRICT

Mrs. G. L. Groover.....Savannah

SECOND DISTRICT

Mrs. J. R. Redfearn.....Albany

THIRD DISTRICT

Mrs. R. H. Pate.....Unadilla

FOURTH DISTRICT

Mrs. Enoch Callaway.....LaGrange

FIFTH DISTRICT

Mrs. E. C. Thrash.....Atlanta

SIXTH DISTRICT

Mrs. W. E. Mobley.....Macon

SEVENTH DISTRICT

Mrs. S. L. Whitely.....Cedartown

EIGHTH DISTRICT

Mrs. D. V. Bailey.....Elberton

NINTH DISTRICT

Mrs. Ralph Freeman.....Hoschton

TENTH DISTRICT

Mrs. W. W. Battey, Sr.....Augusta

ELEVENTH DISTRICT

Mrs. W. C. Hafford.....Waycross

TWELFTH DISTRICT

Mrs. J. Cox Wall.....Eastman

EXECUTIVE BOARD MEETING

Executive Board of the Woman's Auxiliary to the Medical Association of Georgia met in Atlanta on Wednesday, December 7, 1927.

The meeting was called to order by the president, Mrs. Paul Holliday, of Athens. Mrs. C. W. Roberts, of Atlanta, was appointed by the president to act as secretary pro tem. in the absence of Mrs. J. A. Selden, of Macon.

Minutes of last meeting were read and approved. The president announced the appointment of Mrs. Thomas Holcombe, of Union Point, as correspondence secretary. After the

resignation of Mrs. G. O. Whelchel. The district managers are as follows:

MANAGERS

Under new business the State committee chairmen were appointed by the president, as follows:

1st. Education and Publicity Committee—Mrs. C. W. Roberts, Atlanta.

2nd. Public Policy and Legislation—Mrs. J. H. Downey, of Gainesville.

3rd. Finance Committee—Mrs. Stewart D. Brown, Royston.

4th. Hygeia Committee—Mrs. H. W. Birdsong, Athens.

5th. Entertainment and Program Committee—Mrs. W. H. Myers, Savannah.

The visiting ladies of the Fifth District with a committee from the Auxiliary of Fulton County Medical Society were entertained at a beautiful appointed luncheon at the Atlanta Athletic Club by the Fifth District manager, Mrs. E. C. Thrash, who also acted as toast mistress.

In the evening a buffet supper was served at the Academy of Medicine to the members of the Fifth District Medical Society and their wives. An evening of good fellowship was enjoyed.

NEWS ITEMS

The American Board of Otolaryngology will hold an examination at Minneapolis, June 11, 1928, at the session of the American Medical Association; and at St. Louis, October 15, 1928 during the meeting of the American Academy of Ophthalmology and Otolaryngology.

The Sixth District Medical Society met at the City Hall in Griffin on November 30, as the guest

of the Spalding County Medical Society. The following papers were read: The Nervous Patient with Surgical Complaints by Dr. G. Y. Massenburg, Macon; A Typical Case of Acute Rheumatic Fever by Dr. W. A. Newman, Macon; Prostatectomy on Potential Diabetics—Case Report by Ernest Corn, Macon; Intraligamentous Pregnancy—Case Report by Dr. O. R. Thompson, Macon; Significance of Sugar in the Urine by Dr. T. E. Rogers, Macon; Radium Treatment in Cancer of the Cervix—Five Year Results by Dr. C. C. Harrold, Macon.

Dr. Wm. C. Pumpelly has resumed the practice of medicine with offices in the Georgia Casualty Building, Macon, practice limited to diagnosis and treatment.

Dr. Paul J. Peniston, formerly of Moreland, has removed to Luthersville and will continue the practice of medicine at the later location.

Dr. C. L. Davis, formerly of Patterson, Georgia, after spending several weeks in Chicago and at the Mayo Clinic, has located in Okeechobee, Florida.

The Troup County Medical Society met at the Colonial Hotel, LaGrange, Tuesday evening, November 1. Dr. Geo. F. Klugh, Atlanta, delivered an address on "Blood Chemistry;" Dr. M. S. Dougherty, Atlanta, led the discussion; Dr. W. P. Phillips, LaGrange, read a paper on the "Crying of Infants."

Dr. S. F. Seales, Carrollton, Route 1, has equipped and opened a hospital at Hickory Level, a few miles north of Carrollton. A number of patients entered the institution on its opening day; two for tonsillectomies and one for amputation of an arm. Dr. Seales was assisted by Drs. C. C. Fitts and D. S. Reese, of Carrollton.

The Fifth District Medical Society met at the Academy of Medicine, Atlanta, December 7, as the guest of the Fulton County Medical Society. Address of welcome by Dr. Marion T. Benson; Response to address of welcome by Dr. W. S. Ansley, Decatur; report of Councilor by Dr. E. C. Thrash, Atlanta; Dr. V. P. Sydenstricker, Augusta, read a paper on "Recent Progress in Medicine," discussed by Drs. C. W. Strickler, Stewart R. Roberts, J. E. Paullin and R. T. Dorsey. The paper by Dr. R. M. Harbin, Rome, on "Medico-Surgical Problems of Gall Bladder" was read by Dr. W. A. Selman; discussed by Drs. T. C. Davison, F. W. McRae and J. W. Turner. Presidential address by Dr. Wm. A. Mulherin, Augusta.

Dr. and Mrs. W. H. Garrison, Clarkesville, entertained the members of the Habersham County Medical Society and their wives, Friday evening, November 4. Those present were: Dr. and Mrs. R. B. Lamb, Dr. and Mrs. E. H. Lamb, Demorest; Dr. and Mrs. J. H. McClure, Dr. and Mrs. O. N.

Harden, Dr. and Mrs. P. Y. Duckett, of Cornelia; Dr. and Mrs. W. C. Chandler, Baldwin.

Dr. J. K. McClintic, Monroe, has been in New Orleans for several weeks taking a post graduate course at Tulane University of Louisiana School of Medicine.

Dr. W. L. Gannaway, formerly of Virginia, has moved to Smithville and opened offices formerly used by Dr. Ragsdale.

Dr. Walter E. Mobley, Macon, was elected president of the Bibb County Medical Society, December 6. Dr. R. W. Richardson, Macon, Secretary-Treasurer.

The Third District Medical Society met at Cuthbert, November 9, as the guest of Randolph County Medical Society. Dr. A. L. Crittenden, Shellman, read a paper "Cancer Symposium—Case Report;" Dr. R. V. Brokaw, New York, read a paper "The General Physician and Cancer Problem;" Dr. C. C. Harrold, Macon, read a paper "Radium in Cancer of the Cervix;" Dr. Lucius Lamar, Dawson, read a paper "The Treatment of Eclampsia and the Preclampsic Toxemias;" Dr. J. C. Patterson, Cuthbert, "Indigestion Exposed."

During the meeting of the American Psychiatric Association this year at Cincinnati the Central Psychiatric Hospital Association was formed, which is composed of private sanitariums for the care and treatment of nervous and mental diseases. The purposes of this association are to foster co-operation among private hospitals for nervous and mental diseases and maintain higher standards.

Georgia has been admitted to the Birth and Death Registration area for 1928. The registration areas are comprised of those states which register at least ninety per cent of all births and deaths, that is the vital statistics are shown in the Bureau of the Census Annual Reports on Births and Mortality Statistics. The death registration area for 1928 includes all except five states, the birth area all except seven states. These records are of value to the individual in proving age, citizenship, identity, legal rights, and in the settlement of estates and other claims.

Dr. J. C. Norris, formerly of Charleston, S. C., and a graduate of the Medical College of the State of South Carolina, has moved to Decatur and opened offices in the Masonic building.

Dr. W. A. Gardner has purchased a controlling interest in the Stone Mountain Sanatorium, formerly known as the Cheston King Sanitarium, and will operate it in the future. He was formerly in charge of the Southeastern Sanitarium at 418 Capitol Avenue, S. E., Atlanta.

The Terrell County Medical Society met at the office of Dr. Guy Chappell, December 5. Dr. S. P.

Kenyon read a paper on the classification, diagnosis and treatment of infant diarrhoeas, discussed by Drs. J. G. Dean, Guy Chappell and Lucius Lamar.

Dr. J. R. Dykes, Marshallville, has been elected a full time health officer for Grady county.

Dr. and Mrs. E. H. Lamb, Demorest, entertained the members of Habersham County Medical Society and their wives on December 8.

Taylor County Medical Society were delightfully entertained at a six o'clock dinner on December 6, by Dr. and Mrs. J. C. Hind, Reynolds.

The Atlanta Chapter of the Emory University Alumni Association will hold its Charter Day Dinner at the Ansley Hotel on the night of January 25th. A feature of the occasion will be the presentation of an oil painting of Dr. George Henry Noble to the University by the Alumni of the Atlanta School of Medicine.

BOOKS RECEIVED

Nerve Tracts of the Brain and Cord, Anatomy, Physiology, and Applied Neurology by William Keiller, F. R. C. S., Ed., Professor of Anatomy and Applied Anatomy, University of Texas. Contains 456 pages. Publishers: The Macmillan Company, 60 Fifth Avenue, New York City.

The Current Significance of the Word Alum by William D. Richardson, former editor, Industrial and Engineering Chemistry; Member, American Chemical Society. Contains 93 pages. Publishers: The Commonwealth Press, Chicago.

This Smoking World by A. E. Hamilton, Decorations cut by M. J. Gallagher. A fascinating book on tobacco smoking for every man and woman of the present day. Here this strangest of human customs is presented from the viewpoint of the historian, the physician, the psychologist and the economist. Contains 227 pages. Publishers: The Century Company, 353 Fourth Avenue, New York City.

Practical Therapeutics, A text book with especial reference to the application of remedial measures to disease and their employment upon a rational basis by Hobart Amory Hare, B. Sc., M. D., LL.D., professor of Therapeutics, Materia Medica, and Diagnosis in the Jefferson Medical College of Philadelphia, Physician to the Jefferson Medical College Hospital. Twentieth Edition enlarged, thoroughly revised and largely rewritten, illustrated with 158 engravings and 8 plates. Price, net \$7.50. Publishers: Lea & Febiger, 600 South Washington Square, Philadelphia.

BOOK REVIEW

Radium in Gynecology, By John G. Clark, M.D. and Charles C. Norris, M.D., With a Chapter on Physics by Gioacchino Failla, E.E., M.A., D.Sc.

Illustrated, \$8.00. J. B. Lippincott Company, Washington Square, Philadelphia.

The authors of this book are recognized authorities on the subject of the use of radium in gynecology. This monograph differentiates those cases which are suitable for irradiation. The diagnosis, symptomatology, method of treatment, mortality, morbidity, and end results as well as an extensive view of the literature pertaining to the various gynecological conditions for which radium is employed is comprised in this volume. The authors have adopted a conservative attitude regarding the use of radium and evidently feel that radium is an adjunct and not a competitor to surgery. In certain conditions irradiation is clearly the treatment of choice, as in certain cases of benign uterine hemorrhage; in others such as carcinoma of the fundus, surgery gives better end results. The general impression of the monograph is that of a carefully prepared, unbiased analysis of the use of radium in gynecology. The book is, we believe, the only monograph on the subject in English and is probably the most important one published on this subject. The chapter on the physics of radium has been written by Failla of the Memorial Hospital, New York, who has apparently especially prepared it for the average surgeon and physician. This chapter is a masterly portrayal of the physics of this remarkable element. The book is freely illustrated and the publishers are to be congratulated upon the fine appearance of the volume. This book should be of interest to every gynecologist, surgeon, X-ray man as well as to the general practitioner who wishes to keep up with modern methods and to secure the best form of treatment for his patients.

OBITUARY

Dr. Henry T. Simpson, Smithville, died at his home on November 20, 1927. He was born in 1879 and graduated from Atlanta College of Physicians and Surgeons in 1905. Dr. Simpson was a member of the Board of Education of Lee County at the time of his death. He had an extensive practice and was one of the most successful physicians of that section. Dr. Simpson was a member of the Sumter County Medical Society, the Medical Association of Georgia, American Medical Association, Masons and the Baptist church. He is survived by his widow, one daughter, Miss Mae Bell; one son, Henry T., Jr.; three brothers and one sister. Funeral services were conducted by Rev. J. R. Joyner, pastor of the Smithville Baptist church, assisted by Rev. J. W. Ham and Rev. C. R. McKibben. Members of the Sumter County Medical Society acted as honorary pall bearers.

Dr. George L. Alexander, Forsyth, died at his home December 9, 1927. He was born in Houston county in 1872 and graduated from Emory University School of Medicine in 1893. Dr. Alexander

was not only a physician of high standing in his community but took an active interest in the welfare and progress of that section being a leader and continually pointing the way by example to more profitable ways of maintaining the financial interests of his community. Dr. Alexander was a member of the Monroe County Medical Society, Medical Association of Georgia, the American Medical Association and the Methodist church. Surviving Dr. Alexander are his widow, three sons, L. Gilbert, Dr. George H. and Forrest C. Alexander, all of Forsyth; three daughters, Misses Dorothy and Emily of Forsyth, and Mrs. John Bates of Millen; two sisters, Mrs. Banks Stephens and Miss Ruth Alexander of Forsyth. Funeral services were conducted by Dr. A. Chamblee, President of Bessie Tift College, and Rev. J. H. Barton, pastor of the Methodist church of Forsyth, and interment was in the city cemetery.

Dr. Henry S. Maloy, Milan, died at his home November 6, 1927. He was born in Telfair county in 1866 and was a well known physician of that section. Dr. Maloy is survived by his widow and one son, Miliam Maloy.

Dr. W. C. Pirkle, Baxley, died at his home October 30, 1927. He graduated from the University of Georgia Medical Department, Augusta, in 1902. Dr. Pirkle had resided in Baxley and practiced medicine there for twenty years until on account of failing health he went to farming and was one of the pioneers of Appling county in the production of tobacco. He is survived by his mother, widow, two sons, P. and Fred E. Pirkle; two daughters, Miss Mary Pirkle and Mrs. R. B. Parker. Interment was in the city cemetery at Hoschton.

Dr. Thomas N. Berry, Blairsville, died at his home Dec. 11, 1927. He graduated from the Atlanta College of Physicians and Surgeons and was one of the oldest practicing physicians in Union County. Dr. Berry was a prominent citizen and represented his county in the legislature for two terms. He is survived by his widow and three daughters. Funeral services were conducted from the residence and interment in the Blairsville cemetery.

Dr. Peyton H. Keaton, Damascus, died December 7, 1927, while on a visit to Tallahassee, Florida. He was born at Damascus on December 5, 1864 and graduated from the College of Physicians and Surgeons, Baltimore, Maryland, in 1888. Dr. Keaton had practiced medicine for thirty-six years in his home community and was held in the highest esteem by his acquaintances. He was a member of the Tri Counties Medical Society, the Medical Association of Georgia and the American Medical Association. He is survived by his widow and several children. Interment was in the city cemetery.

Dr. Giles S. Kelly, Lawrenceville, died at his home December 11, 1927. He was born in 1863. Dr. Kelly was a prominent physician of his com-

munity and a member of the city council of Lawrenceville at the time of his death. He was a member of the Masonic fraternity, Gwinnett County Medical Society, Medical Association of Georgia, American Medical Association and the Baptist church. Dr. Kelly is survived by his widow, five sons, Otis S. Kelly, Dr. D. C. Kelly, John I. Kelly, all of Lawrenceville; G. F. Kelly, Gainesville; Paul V. Kelly, Ashburn; and one daughter, Miss Myrtice Kelly, Lawrenceville. Funeral services were conducted by Rev. J. A. Reiser from the First Baptist church and interment in the new city cemetery.

Dr. J. A. George, Savannah, died at a local hospital on December 9, 1927. He was born in 1867 and graduated from the University of Maryland School of Medicine and College of Physicians and Surgeons in 1892. Dr. George owned a drug store and practiced medicine in Hawkinsville from 1894 to 1910, moved to Cochran where he resided for eleven years, afterwards moving to Savannah. He was a member of the Second Baptist church. He is survived by his widow, one son, James George, and one daughter, Miss Mary George. Funeral services were conducted by Rev. W. D. Ogletree and interment in the city cemetery at Hawkinsville.

Dr. Charles E. Murphey, Atlanta, died at his residence, 319 Ponce de Leon Avenue, N.E., on December 21, 1927. He was born in Hamilton, Georgia, July 29, 1857 and graduated from Emory University School of Medicine, Atlanta, in 1886. Dr. Murphey took a post graduate course in New York City and was on the staff of the Bellevue Hospital for a number of years, and after his return to Atlanta was professor of pediatrics in the Southern Medical College for five years. He took an active interest in all civic affairs and represented the Fourth Ward for two terms in the city council. Dr. Murphey was a member of the Fulton County Medical Society, Medical Association of Georgia, American Medical Association and the Grace Methodist church. He is survived by one daughter, Mrs. J. L. Robinson; one granddaughter, Miss Mary Ann Robinson; a brother, Mr. W. E. Murphey, Tucson, Arizona; a sister, Mrs. C. C. Hawkins, Americus. Funeral services were conducted by Rev. S. R. Belk from the Grace Methodist church and interment in Oakland cemetery.

Dr. S. A. Murray, Tazewell, died at his home on December 2, 1927. He was born in 1856 in Schley county and graduated from Emory University School of Medicine in 1885. His character was marked by integrity, honesty and faithfulness to duty. Dr. Murray was a member of the Methodist church. He is survived by his widow, two brothers, Monroe and Rufus Murray; three sisters, Mrs. Jack Cook, Misses Nannie and Mary Murray, all of Ellaville. Funeral services were conducted by Rev. W. J. McLenney from the residence and interment in the family cemetery.

PUBLIC HEALTH

(Continued from page 35)

and drained from the stable above, its filth. Days passed into months and months into years, and the little delicate body that housed the brilliant mind failed to grow. No examination was made; teacher after teacher in their eagerness to close the work of the day did not question; doctors did not think it worth while; business men, engrossed with their duties, paid taxes as a matter of course, grumbling because they were so high and so little received in return. Then the Great God in disgust of the world and with infinite love for His little one, slipped the lease of life and Heaven became rich with its diadem again, and we became poorer. Ah, what a loss! For silenced was the voice that could have struck the cords of the universe, to respond in rhapsodies from a Celestial Choir. Stilled was the hand that could have painted upon the imperishable canvas of our minds a panorama of beauties untold, in a galaxy of tinselled colors, that would glow in the eternal ether, unforgettable to our dying day. How we thoughtlessly reap of the fruits of selfishness, lust and willful ignorance, because we do not guard closely the health of our children, when the wealth of all the world is locked up in these little minds; freighted to us in delicate bodies that should by all means receive the first consideration of the taxpayer, for it houses an intellect which is a gift of God and an attribute of God Himself. The masterpiece of His creation. Did I tell you I would speak to you on Wealth was it Health? The words are synonymous, I cannot distinguish the one from the other.

LISTER'S DISTRIBUTORS

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No. 2

PRESENT STATUS OF SURGERY OF THE STOMACH AND DUODENUM*

As Observed in Various American and
European Clinics

Thomas Harrold, M.D.
Macon

Perhaps in no other field of medicine is there as great a diversity of opinion at the present time as that which exists concerning the proper treatment of lesions of the stomach and duodenum. It offers one of the most frequent topics of discussion at meetings and almost every issue of every medical journal carries at least one article bearing on this subject. When men who are connected with large clinics with the best facilities, and who see hundreds of cases, vary so widely in their opinions, it is difficult indeed for the man who sees only an occasional case to know how to advise his patient.

Within the past few years it has been my good fortune to observe the work done in a number of the better known clinics in this country and in Europe. It was thought that it might be of interest to bring these personal observations together for purposes of comparison and to see, if possible, what is the general trend of opinion and what general conclusions may be drawn. The difficulties and problems of diagnosis will not be discussed at all.

On one fundamental point all seem to agree, that all cases of gastric and duodenal ulcer should be given every possible benefit of medical treatment before surgery is contemplated. This is particularly true of duodenal ulcer in which there is no danger of

malignant degeneration and because many duodenal ulcers are undoubtedly cured by proper diet and medical therapy. Because of the danger of malignant degeneration, gastric ulcer should come to surgery earlier if medical treatment does not produce results. In fact with many of the large indurated gastric ulcers there can be no reasonable hope of cure by medical means. Of course if there is any suspicion of cancer no time should be lost in temporizing with medical treatment. Continued hemorrhage, no matter how small, and perforation or obstruction call for surgery. So in a word all duodenal ulcers and most gastric ulcers are given a thorough trial under careful medical care before coming to operation in all the better clinics everywhere.

But it is chiefly with the type of surgical treatment that is used in various places when it does become necessary to operate on the duodenum or stomach that this paper is concerned. Duodenal ulcer, gastric ulcer and carcinoma of the stomach will be considered separately as every one recognizes that they require different treatment.

Duodenal Ulcer

At Johns Hopkins in Baltimore, Dr. J. M. T. Finney uses the pyloroplasty that he devised in a great many cases—probably 75% of all duodenal ulcers upon which he operates. Most other surgeons find it applicable in a much smaller per cent of cases. In performing this operation Dr. Finney is almost always able to excise the ulcer at the same time. With large indurated ulcers and when the duodenum cannot be satisfactorily mobilized for a pyloroplasty, he often does a pylorotomy and then he reunites the end of the stomach to the side of the duodenum after the method described by Finney and Harbérer. In cases where either pyloroplasty or pylorotomy would be difficult or dan-

*Read before the Medical Association of Georgia, Athens, Ga., May 12, 1927.

gerous he does a posterior gastro-enterostomy. Dr. Finney never does a real partial gastric resection for duodenal ulcer. Dr. Finney's mortality with pyloroplasty is about the same as with gastroenterostomy and he claims better results.

At Roosevelt Hospital in New York, the late Dr. Charles Peck always did gastroenterostomy for duodenal ulcer and claimed about 85% of cures. He found pyloroplasty applicable in only a small number of cases and felt that it was unjustifiable to do a pylorotomy or partial gastrectomy with the accompanying increase in mortality when gastroenterostomy gives such a large number of cures. The occurrence of gastrojejunal ulcer in 3% to 5% of cases is a real criticism of this policy, however.

Dr. Berg at Mt. Sinai Hospital in New York does partial gastric resection in many cases. Dr. John Erdman of New York at present is using the pyloroplasty as described by Horsley with very gratifying results.

The Mayo Clinic has long been the outstanding exponent of gastroenterostomy in treatment of duodenal ulcer. Recently, however, they have been using pyloroplasty or pylorotomy with attempt at removal of the ulcer in a considerable per cent of their cases. Perhaps the distressing occurrence of gastrojejunal ulcer has contributed to this change.

Dr. F. B. Lund of Boston does gastroenterostomy except in bleeding ulcers when excision or resection is done.

In the clinics of Finsterer and Von Eislerberg in Vienna, prolonged medical treatment is an important part of their policy. If operation is performed, however, a partial gastrectomy with removal of the acid bearing part of the stomach is almost always done. It is claimed that these radical resections are done with a mortality of only 2 per cent which is no more than that from gastroenterostomy. They claim a high percentage of satisfactory results—90% or more.

Dr. Bastianelli of Rome, Italy, and perhaps the best surgeon in that country, prefers to have all duodenal ulcers treated medically and if necessary accept the handicap of two or three months indigestion each year rather than operate upon them except in the

presence of bleeding, obstruction or perforation. If for any reason he does operate he does a partial gastric resection. In his experience upon Italians, there is a 35% occurrence of gastrojejunal ulcer following gastroenterostomy. He cannot explain this remarkable state of affairs except on a basis of some racial or dietary peculiarity of Italians. Of course this tremendous incidence of gastrojejunal ulcer forestalls any consideration of gastroenterostomy in these cases. He feels that duodenal ulcer is not often dangerous to life and that therefore he is not justified in advising partial gastrectomy, with its attendant risks, except under unusual circumstances.

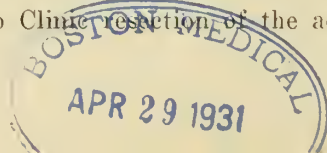
Mr. A. J. Walton of London is content with gastroenterostomy in most cases.

Gastric Ulcer

Dr. J. M. T. Finney of Baltimore has two sayings that have become almost axiomatic with him and in a way sum up his attitude towards the whole problem of ulcer. "Any ulcer is better out than in," and "A gastroenterostomy is a confession of failure." He concurs in the opinion held by many that the best results from gastroenterostomy are obtained in the presence of complete or almost complete obstruction of the pylorus and he frequently uses it in cases of this type that he feels would not stand a larger operation. However he frequently does a simple resection of the ulcer and nothing else. More often he does a partial gastric resection. The method of anastomosis of choice with him is entire end of stomach, with the side of the duodenum or if this is not possible, a gastroenterostomy leaving a blind pouch of duodenum after the second method of Billroth.

The late Dr. Charles Peck of New York belonged to the so-called conservative school in regard to gastric ulcers and frequently did a gastroenterostomy and nothing else if the ulcer was small and not indurated. More often he tried to excise the ulcer and then do a gastroenterostomy. In large indurated ulcers he did a partial gastrectomy but did not do as large resections as many other surgeons advocate.

At the Mayo Clinic resection of the acid



bearing part of the stomach is done in almost all cases in which the ulcer is of any size. Various methods of anastomosis are used according to the indications in each case. The cautery punch operation of Balfour and simple resection of the ulcer are used for small ulcers and under certain special conditions.

Dr. F. B. Lund of Boston advocates gastroenterostomy in pyloric ulcer particularly of the obstructive type. He thinks that danger of malignant denegeration in this region is less than the increased risks involved in resection of the pylorus. The danger of malignant degeneration in ulcers of the lesser curvature is much greater and he feels that they should be resected by some means—the combination of cautery punch and gastroenterostomy having been very satisfactory in his hands and at a reduced mortality when compared with partial gastrectomy.

In Von Eiselsberg's Clinic in Vienna a partial gastrectomy is almost always done for gastric ulcer. In fact apparently gastroenterostomy is never used except as a quick way of relieving obstruction in otherwise inoperable cases.

Dr. Bastianelli in Rome, Italy, does partial gastrectomy for practically all cases of gastric ulcer. In his experience he has had a high per cent of recurrence of the ulcer where simple excision was done and he never does gastroenterostomy on account of the occurrence of gastrojejunal ulcer. He does believe in operating on gastric ulcers because of the danger of malignant degeneration.

Mr. A. J. Walton of London is a strong advocate of wedge resection of ulcer of the body of the stomach. A gastroenterostomy is performed at the same time. He also closes the pylorus with one silk purse string stitch, expecting it to reopen in a few months. He reports 90% satisfactory results in a group of cases treated this way. He reserves partial gastrectomy for those cases in which wedge resection would be difficult or impossible and for large ulcers nearer the pylorus which are suggestive of cancer. In his experience gastrojejunal ulcer and recurrence of ulcer are unusual where the original ulcer was located away from the pyloric end and the combination of wedge resection and gastroenterostomy done.

Gastric Carcinoma

In this condition there is more general agreement as to treatment. Every one does a radical resection if this is possible and if there are no demonstrable metastases in the liver or other organs. Having done a sufficiently wide resection, the methods of anastomosis are legion and vary with different operations. In general they fall into three main groups. 1. The Billroth I or one of its modifications—cut end of stomach to the duodenal stump. 2. The Billroth II posterior gastroenterostomy with a blind end of duodenum. This one is most frequently used. 3. The Balfour—Polya long loop anterior anastomosis of jejunum to cut end of stomach.

The main points of interest in the surgical treatment of carcinoma of the stomach are two, first the results obtained and secondly the operative mortality.

As for permanent cures, claims vary greatly. Dr. Finney states that he has never had a permanent cure of carcinoma of the stomach in all of his extensive practice no matter how early the lesion at time of operation. He knows of only one proved case in the practice of any of his friends in Baltimore. Dr. Peck in New York had only one cure during his entire practice. That patient was seen and was well thirteen years after operation. One of my friends has recently gone over the records of the Cincinnati General Hospital and of the last one hundred cases of carcinoma of the stomach admitted to that hospital not a single one is alive at the end of five years. Only forty of this group were operated on. In striking contrast are the figures quoted by Wilson in the January number of the Southern Medical Journal. The length of time the patients were followed is not stated but the following per cent of "cures" were recorded:

Hartman (Paris) 25% (1-25 yrs.)

Eiselsberg (Vienna) 27%.

Mickulicz 27%.

Mayo Clinic 37%.

Surely most of these are one, two or three-year cures. On another occasion the Mayos and Eiselsberg have claimed only about ten per cent of five-year cures. Some of the difference in figures can be accounted for by variation in pathological opinions. Borderline cases that are diagnosed carcinoma of

the stomach in some clinics are considered only inflammatory glandular hypertrophy in others. That there is a certain small per cent of permanent cures no one will deny, but is very small—less than one per cent perhaps.

As for the primary operative mortality, it is high every where and varies somewhat according to the type of case that is considered operable. Some surgeons claim only a ten per cent mortality for their radical resections, others admit a thirty per cent mortality. No doubt the average mortality for this type of operation is around twenty or twenty-five per cent which after all is quite formidable. However there is general agreement that the prolongation of life and relief from many distressing symptoms makes the radical operation justifiable even in the face of the high mortality and the small number of cures.

Of course inoperable cases with obstructive symptoms or where obstruction seems likely to develop in a short time may obtain great relief and prolongation of life from a simple gastroenterostomy without any attempt at removal of the carcinoma.

Anesthesia

Both Bastianelli in Rome and Finsterer in Vienna do almost all of their stomach and duodenal surgery under local and splanchnic anesthesia. It is not a perfect anesthesia by any means and the patients do suffer considerable pain. However, both of these men claim that they have reduced their operative mortality by half since adopting this method and stopping the use of ether and chloroform. How many American patients would consent to suffer for an hour or two if by doing so they doubled their chances of leaving the hospital alive?

SUMMARY

Duodenal Ulcer

The weight of opinion is in favor of gastroenterostomy in most cases. Pyloroplasty and pylorotomy have a very definite place in the treatment of bleeding or perforating ulcers and in very large indurated ulcers. Some more radical surgeons are advocating partial gastric resection and reporting excellent results. With good surgical judgment about 90% of satisfactory results may be

expected and the mortality should be under 5%.

Gastric Ulcer

The ulcer should be removed. Small, accessible ulcers are perhaps best treated by local excision alone or combined with gastroenterostomy. For the larger ulcer of the indurated type a partial gastrectomy with the most convenient type of anastomosis should be done. About 80% or 85% of satisfactory results may be expected. The mortality will probably be 5% plus.

Carcinoma of the Stomach

Because of prolongation of life and relief from symptoms operable cases should have a radical resection in spite of the high mortality—about 20%—and the rarity of permanent cures.

From all of the above it can be seen that no one surgical procedure can be relied upon in this difficult and complicated group of cases, but each one must be judged on its own merits after the exploration is made. Then the operation best suited to that particular case should be chosen. It is here that experience and surgical judgment are most valuable for if the proper operation is chosen the technic will not be too difficult for the well trained man and surely no other should venture into this field.

There can be no better exemplification of the general rule that when there are many cures for any given condition advocated by as many different men, the ideal solution has not yet been found. For when the ideal is found there can be no two opinions and, as in the case of diphtheria, there will be only one method of treatment.

DISCUSSION ON PAPER OF DR. HARROLD

Dr. R. C. Franklin, Swainsboro: This paper comprises such a broad field, taking in observations in both American and European clinics in gastric and duodenal surgery, that it makes it difficult to know just where to begin. Then, too, being some distance from the author of this paper and not being able to grasp fully the points he brought out in this paper put me at a disadvantage in the preparation to discuss the paper. Anyway you can very readily see from the variety of types of procedure that he gives us in handling these conditions that there is quite a diversity of opinion as to the treatment of these cases.

An opportunity to observe these conditions

in many American and European clinics gives an advantage in arriving at definite conclusion as to the best manner of handling gastric and duodenal ulcers. Even then the judgment of interest and the surgeon should, if possible, go hand in hand. If the patient is in good physical condition and is getting along reasonably well, then surely we should resort to the medical treatment and slowly lead up to the surgical treatment when it becomes evident that surgical procedures are to be followed out. I feel sure that surgeons who are trained for this work are well versed in the types of operation that we should do. The essential thing is deciding what patients should be operated and when they should be operated. My observations in the clinics of Central Europe were that there were many diversities of opinion in handling these conditions, especially ulcers of the stomach as well as of the duodenum. They are handled all the way from jejunostomy to gastric resection. One well known European surgeon handled most of his cases by putting a tube in the upper part of jejunum and feeding the patient for a period of four to six months through this tube, resting the stomach entirely. In other clinics they are more radical in their handling of these cases. For instance, in the German clinics, they do gastric resection in many of their ulcer cases.

Dr. J. K. Quattlebaum, Savannah: I am sure that all of us have enjoyed this great paper of Dr. Harrold's on this severe condition. The fact that there are so many surgical procedures for ulcer of the stomach and duodenum is convincing proof that no one operation will cure them all. One reason why we do not cure more of them is that ulcer may be a symptom rather than a disease. We do not know for certain the true etiological factor in ulcer and no treatment that aims at the results rather than the cause of the trouble is apt to be wholly successful.

I am glad to hear him stress the medical treatment, particularly for duodenal ulcer. The danger, however, is in letting them go too long. I have operated on perforated ulcers that happened under treatment, and on cases with abscess under the liver, and such cases that die can not be called the surgeons' mortality. We have a medical mortality, too, and these belong to them.

Gastro jejunal ulcers may follow any operation on the stomach, not only after gastroenterostomy but even after subtotal gastric resection. I have seen them at the Mayo clinic. Gastro enterostomy is probably the most satisfactory operation in surgery when it is clearly indicated. Its very success has been against it, for its early history it was so successful

that it came to be applied to all kinds of ulcers and to all kind of stomach complaints regardless of whether the trouble was in the stomach or in the other parts of the body.

There seems to be a great difference of opinion as to the frequency of marginal ulcers. Lewishon at Mt. Sinai claims to find them in one third of the cases who have had gastroenterostomy, while Balfour in his monumental paper read before the American Medical Association at Atlantic City a few years ago, reported 1000 cases of gastroenterostomy done for duodenal ulcer—ten years before. Of the 1000 patients 880 were alive, well and free of all symptoms. It is just a matter as to whose statistics you care to accept.

A bleeding ulcer is a difficult proposition. Pemberton of the Mayo clinic told me that he had had them to continue to bleed even after the resection operation of Devin, and they may continue to bleed after any of the indirect operations for ulcer, and you can not always apply the direct operation to such an ulcer.

Summing it up, there are two operations for ulcer, the direct and the indirect. Pyloroplasty with removal of the ulcer or removal of the ulcer alone is the direct type. Gastro enterostomy and gastric resection which removes the acid portion of the stomach and leaves the ulcer behind are equally indirect operations.

I want to stress again the medical treatment for duodenal ulcer. Operation is indicated when there is pyloric obstruction, perforation or threatened perforation or persistent hemorrhage. Gastric ulcer which does not yield promptly to medical treatment and particularly if the patient is past thirty should be operated on, for it is better to treat an ulcer of the stomach surgically than to treat a cancer of the stomach medically and no one can tell before hand which is ulcer and which is cancer, until the patient is beyond favorable help.

I want to speak a good word for gastroenterostomy, for as Moynihan says, "when indicated it is the safest, the most satisfactory surgical procedure worthy of the name of major operation" carries a mortality rate of less than 3 per cent and where clearly indicated cures nine times out of ten.

The second annual Conference on Public Health, under the auspices of the American Medical Association, will be held at Association headquarters, 535 North Dearborn St., Chicago, March 30 and 31, 1928. Representatives of official public health agencies, voluntary agencies and various medical groups will be in attendance.—*Jour. A. M. A.*, Feb. 4, '28.

TETANY FOLLOWING SECONDARY THYROIDECTOMY*

Report of Case

Charles E. Waits, M.D.
Atlanta

Tetany following thyroidectomy was not an uncommon complication in the earlier days of thyroid surgery, due possibly to a lack of knowledge of the anatomy and function of the parathyroids. However, after the adoption of a more careful technique in thyroidectomy, as was first outlined by Kocher, Halsted, and others, the complication was reduced to a point where for many years it has received only casual mention as one of the serious pitfalls in thyroid surgery.

Recently the literature has contained an increasing number of reports of cases of tetany following thyroidectomy. One writer¹ reports its incidence as occurring in 15, 12 and 11 per cent respectively in three groups of cases. Whether this increase is due to faulty technique, an increasing amount of surgical courage, or to the fact that the condition is more readily recognized is debatable. Certainly the average experienced surgeon proceeds with thyroidectomy today with a great deal more confidence than was true a decade ago, and no doubt in our anxiety to remove enough tissue we sometimes injure the parathyroids sufficiently to produce a transient tetany. A routine post-operative study of all patients who have had thyroidectomies would probably show some disturbance of parathyroid function.

Another factor which may explain the seeming increase in the incidence of tetany is the relative increase in the number of patients in whom it has been necessary to do a secondary thyroidectomy. In such patients the normal anatomical relations of the thyroid capsule have been greatly disturbed and in the secondary operation one is more liable to actually remove, or to do serious injury to the parathyroids. The case which I report today seems to illustrate this point².

In spite of a most careful technique and

regardless of the type of goiter with which one is dealing the complication will occur, and should always be thought of as a possibility and provided for in our post-operative management of thyroid patients.

Ordinarily the symptoms of post-operative tetany appear within 24 to 48 hours after operation and are characterized at first by a tingling or cramping sensation in the forearms, fingers, and feet. Occasionally the symptoms may be latent in character appearing from 5 to 15 days after operation. Where there has been actual destruction or removal of the parathyroids symptoms may appear more promptly and progress to a fatal termination within 2 or 3 days. When fully developed this disease is characterized by toxic and intermittent spasmodic contractions in the flexor muscles of the upper extremities and occurs to a lesser degree in the lower extremities. Chvostek's sign, or a twitching of certain facial muscles is always present in well defined tetany; obtained by gentle percussion over the facial nerve at its point of emergence in the parotid region. Trousseau's sign, or the so-called obstetrical hand is usually present, though one may see in hysteria a phenomena simulating this sign. Erb's sign, in which the irritability of the motor nervous system is greatly increased is usually present. This phenomena is best produced with the galvanic current⁴.

Associated with the above-mentioned symptoms is a most marked apprehension; even in mild cases of tetany this is an outstanding symptom and one which is difficult to control. The blood calcium content is lowered in proportion to the degree of tetany. Normally the blood calcium per 100 cc. of blood ranges from eight to twelve mgm. If the calcium content falls below 6 mgm. per 100 cc. of blood serum symptoms of tetany usually appear.

Until recently the treatment of post-operative tetany consisted of calcium administration in varying doses, thyroid and parathyroid extract and a diet of high calcium content. Collip in 1924 discovered a most active content of the parathyroids which he later standardized and is now furnished by Lilly & Co., under the name of Para-Thor-Mone². This product has proven especially useful in

*Read before the Medical Association of Georgia, Athens, Ga., May 12, 1927.

the control of post-operative and other forms of tetany.

Case Report

Case T-341—Miss G., age 31, consulted us in October, 1917, at which time she presented a clear cut picture of Graves' disease. Her history indicated that she had suffered from hyperthyroidism for a period of from 6 to 9 months.

There was a diffuse enlargement of both thyroid lobes and isthmus. A definite thrill and bruit over both superior poles, moderate exophthalmos, positive Stellwag and Von Graefe; marked tremor, pulse rate 110 to 130 in bed, and a loss of twenty pounds in weight over a period of three months. After two weeks' rest in bed primary thyroidectomy was done under general anesthesia. Owing to patient's poor condition not enough tissue was removed from the right lobe. Patient had a rather severe post-operative hyperthyroid reaction, otherwise convalescence was uneventful.

A report from the patient two years later indicated that she was well with the exception of an occasional attack of tonsillitis with possibly a mild arthritis. She consulted us again in February, 1926, at which time there was evidence of a definite recurrence of goiter in the upper right lobe and symptoms of a mild hyperthyroidism. At this time her metabolic rate was plus 36. Secondary thyroidectomy was advised and she was finally brought to operation in November, 1926. The gland area was exposed through the old incision. Considerable difficulty was experienced in exposing the recurrent tissue in the right lobe. Practically all of this tissue was resected, leaving only a small strip over the posterior capsule. Patient's condition was considered satisfactory for a period of 48 hours postoperative. During the third 24-hour period patient became very apprehensive and complained of a tingling and cramping sensation in her fingers and toes. On the morning of the fourth day patient presented very definite evidence of tetany. A positive Chvostek, Trousseau, and an increasing apprehension. Large doses of calcium lactate and parathyroid substance were administered immediately, without relief of symptoms in 24 hours. Her blood calcium was reported to be 5 mgm. per 100 cc. of blood

serum. She received 30 units of parathyroid extract (Collip) with partial relief of symptoms within 3 hours. Additional doses of 20 and 30 units of the extract were given during the next 24 hours with almost complete relief of symptoms. Administration of calcium lactate was continued, and on the 7th post-operative day the blood calcium was 7 mgm. per 100 cc. of blood serum. She continued to present evidence of mild tetany for a period of three months, with only an occasional dose of Parathyroid Extract and constant usage of average doses of calcium lactate. During this period her blood calcium ranged from $6\frac{1}{2}$ to 8 mgm. per 100 cc. of blood serum. During the past six weeks she has received only one dose of Parathyroid Extract and her blood calcium is practically normal. She still has a mildly positive Chvostek sign. This case is the only one of definite tetany which has occurred in the writer's experience in 195 thyroidectomies.

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DISCUSSION ON PAPER OF DR. WAITS

Dr. A. R. Rozar, Macon: I know of no surgical condition in which a perfect surgical technic is more important than in operation for goiter. I know of no surgical operation in which the surgeon is any more helpless to prevent this complication than in secondary operation for goiter. If it were possible for us to know whether the parathyroid was injured at the first operation by some definite procedure, like catheterization of the ureters, —we know if both kidneys are functioning then we can take out one kidney—we might prevent these complications, but in the hands of the best men we are liable to get an injury to the parathyroids in spite of all precautions either by traumatizing and atrophy or by actual removal. This case is of interest because it happens to all surgeons under the most advantageous circumstances. The most important thing that I see that is brought out by this paper is that it offers us a treatment

other than calcium treatment which we relied on for so long.

Dr. A. Elkin, Atlanta: The subject of thyroid surgery has changed so much in the last ten years that any paper or report of end-results is always of interest. I have had the opportunity in the last four years to observe about 200 or more goiters in the Good Samaritan Clinic of Atlanta, a charity clinic operated for diseases of the ductless glands. Of course the thyroid falls into that. This clinic is conducted by Dr. Floyd McRae, Jr. I have had opportunity to make some very pertinent observations. We have had only one case of what we would call tetany and that was not postoperative tetany, so I hope, Mr. President, that I am not out of order in discussing this paper. We have learned this about operation on thyroids, that formerly too many necks were cut open. I am sure that Dr. Waits now does not operate on as many people as he formerly did. Dr. Floyd McRae who is in charge of this clinic and has been for four years, with over 200 goiters has operated on one. Dr. Waits himself operated on the other. We have had two operations in 200 cases. We have learned that there is one type of goiter, at least the only type that we have seen, that produces tetany, and which we operated on. It was a case that we called pelvic goiter—a goiter in a woman coming on in the later years of life, with accompanying signs of dysmenorrhea and menorrhagia and other distressing signs of a long childbearing era. This woman went to the clinic and was not operated on. She developed a tetany. She later came back and we were able through our records to prove to ourselves at least that she had a pelvic goiter. We put her on ovarian treatment and the tetany promptly cleared up.

For postoperative tetany parathormone has been tried out by a sufficient number of men to prove its value. I have used it in two or three cases and I have not questioned its value. I do not want to leave this impression, that there are too many goiters operated upon that are pelvic in origin, particularly in women, and of course most of our goiters come in women, who could probably be made even better for operation by pelvic treatment; not local pelvic treatment but endocrine treatment through ovarian hormone.

Dr. C. W. Roberts, Atlanta: The parathyroid glands are rarely seen by experienced men who do a large volume of thyroid surgery. These structures fortunately lie behind the posterior capsule of the gland, an area of the neck for which surgeons early developed a commendable respect. Concealed and protected behind this anatomic barrier they come into view and suffer direct injury only when

this danger zone is unnecessarily violated. More recent studies, however, reveal that the parathyroids may occasionally lie distributed over the anterior portion of the gland and that accessory parathyroid tissue may even be found in other neck structures more or less disassociated with the thyroid gland proper.

Notwithstanding these aberrant cases the appearance of frank tetany is a rare complication in thyroid operations. As Dr. Waits has told us he has seen one active case in a large experience and I am dealing at the present time with the only example I have encountered in a limited but not inconsiderate practice in this field. But the presence of active tetany now being more frequently reported as its syndrome is recognized has been the means of focusing attention on its latent form which has been found to accompany a goodly percentage of thyroid disturbances both before and subsequent to operation. The primary examination therefore should take this complication into account and when its submerged symptoms are found special precaution must be exercised at operation as well as means for its ready control borne in mind. As has been suggested by the essayist, tetany results from interference with normal level of available calcium in the blood stream. The parathyroids govern this level in a way comparable to the action of the pancreatic hormone in controlling sugar metabolism. Mason of Boston, working in Lahey's clinic, has apparently demonstrated that calcium appears in the system in three forms, that is, crystalline calcium, protein bound calcium and free calcium ions, the latter presumably representing the only form of calcium that is capable of exerting its physiological effect. The function of the parathyroids is to keep available an adequate supply of calcium ions drawing on other calcium stores as necessity demands. The integrity of these glandules may be disturbed by pressure resulting from increase in thyroid gland mass or as pointed out by Dr. Waits may follow repeated series of X-ray treatments with their sequential fibrosis. In such cases the addition of operative insult which further temporarily cripples the adequacy of the blood supply to the remaining gland coupled with the loss of blood incident to the removal of large adenomatous or hyperplastic glands furnish the precipitating factors necessary to the appearance of active tetany such as was observed by Dr. Waits in the case reported. Death from acute parathyroid deficiency comes about as a result of an intensive excitement of the nervous system. Localized spasm of muscle groups usually initiated by contraction of the forearm flexors presenting the well known accoucheur's hand and later spasm of the diaphragm and other

muscles of respiration cause death. The hormone obtained from the parathyroids of cattle isolated in 1924 by Collip furnishes us an efficient means of control of acute tetany from any cause. Its use is followed by magical results. The dose is 20 units or 1 cc given hypodermically to be repeated cautiously as needed usually not more than once daily. The emergency thus cared for the further needs of the patient are met by spontaneous adjustment with recovery of parathyroid function as aberrant glandules heperthrophy or collateral blood supply is re-established. This splendid paper is very timely and of extreme value to those concerned with thyroid surgery and I wish to express to Dr. Waits my personal appreciation of his interesting contribution to our program.

Dr. Charles E. Waits, Atlanta (closing the discussion): As has been stated by Dr. Roberts we have been taught that the parathyroids bear a certain normal anatomical relation to the thyroid capsule, usually in or behind the posterior portion. Recent reports, however, seem to indicate that there is considerable variation in the relation of these bodies to the thyroid gland and its capsule, and even though we may exercise a most careful technic in thyroidectomy tetany will occasionally complicate our procedure.

Personally I have never seen at operation what I recognized to be a parathyroid. I think one is more liable to remove or injure the parathyroids in the enucleation of unusually large colloid and adenomatous growths where the tissues are distorted and inward or outward rotation of the gland has occurred. However, if we follow routinely the practice of being sure that we have exposed the gland cleanly, making all ligations and forcep applications flush with the gland, tetany will be a most infrequent complication.

As was indicated in my paper and I think illustrated in this case report, there was no evidence of tetany following the first operation, but undoubtedly some injury was done to the parathyroids, especially on the left side, since at the second operation the remnants of the left lobe were not disturbed.

CONGENITAL PYLORIC STENOSIS IN ADULT LIFE*

RALPH H. CHANEY, M.D.

Augusta

In view of the vast literature which is accumulating on congenital pyloric stenosis in infancy, it may not be unwarranted to recall that this condition also manifests itself in adult life. Though this report deals with only a single case it serves to direct attention to a subject practically absent from American medical literature.

From the historical viewpoint congenital stenosis of the pylorus was first studied in detail by Landerer of Freiburg in 1879, though Osler gives credit for recognizing the first case to Beardsley in 1788. Landerer reported ten cases found at autopsy in which the pylorus was narrowed to a diameter of two millimeters or less in which other associated lesions, save for enormous dilatations of the stomach, were absent. Because clinical evidence existed in only one case Landerer was led to the belief that the condition should be of importance to the clinician. In 1885, Maier of Freiburg reported thirty-one cases in which he believed the lesion to be congenital. The age incidence varied from twelve to seventy-five years. He grouped his cases into those where narrowing existed without other associated lesions and those associated with hard indurated thickening about the pylorus. These groupings conform to those seen in the congenital types. More recently Maylard has found nineteen cases of pyloric stenosis in adults at operation in which the thickening and tumor formation were present at the pylorus. Russell reports three cases proved at operation. Oliver reports a case at fifty-one showing an annular pyloric thickening and Graham reports a case where a hard, cartilagenous pylorus was found in a man of forty-six. Cure resulted in both of these last mentioned cases following the use of the Rammstedt operation.

Considering the etiology of congenital le-

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sions manifest in adult life, when we review the infantile type we find that a fair proportion of cases recover under medicinal and dietetic control. Holt reported approximately fifty per cent of his cases treated medically as recovering, the same relative proportion being noted by Henbner, Bendix and other German authors, while Hutchinson in England reports cures in as high as eighty per cent. Even Strauss, the most optimistic advocate of the surgical treatment of this condition in infancy, reports that approximately one-third of cases are medical, the differentiation being dependent upon the amount of barium residue remaining in the stomach at the end of four hours following its ingestion. Bass and Haas believe that the use of atropine results in many non-surgical cures. McDonald states the preponderance of evidence strongly points to the fact that the tumor formation in the infantile type is permanent and believes that cases treated medically are prone to relapse later in life when intercurrent disease gives rise to phenomena causing a recrudescence of symptoms. This is contrary to the opinion of Thompson who believes that the infantile type is a self-limited disease, for if death does not arise from inanition or some complication, the natural growth and development of the structures will always, in time, remove the obstruction completely. Even in face of such diverging opinion there is a basis for the etiology of the adult form in the so-called recoveries from the infantile type.

While recrudescence of a quiescent or supposedly cured infantile lesion probably forms in a large measure the etiological factor in the adult type, the theories of causation of both forms are essentially the same. Many theories have been advanced to account for the process. Hirschsprung, who first brought the importance of the condition to the attention of the medical profession, advanced the theory that the lesion was a primary development hypertrophy. Thompson regards the more probable cause as being a muscular hypertrophy resulting from a long continued inharmonious working of the various element controlling the emptying of the stomach. He believes the inco-ordination to have existed prior to birth but to have remained quiescent until the increase in the muscular

coat within, associated with the rather unyielding peritoneum externally, causes longitudinal folding of the mucous membrane and diminution of the pyloric opening, resulting in the production of active symptoms. Still, supporting this theory, stresses the fact that the use of the term congenital does not mean that the lesions exist from birth but that some inherent lack of stability exists, so that, though a child starts with a favorable mechanism able to work well for a few weeks, months or years, the mechanism is certain sooner or later to get out of order. Pirie advances the most recent theory of causation, namely, that the condition is due to hyperadrenalism. His basis for this theory depends on the work of Keith and Schafer. Keith has shown that the pylorus and the suprarenal medulla become simultaneously differentiated at the third fetal month. The medulla at this time is larger than the kidney but normally progressively diminishes in size to reach relatively normal limits shortly after birth. Schafer has been able to show that adrenalin when injected into the suprarenal vein causes spasm of the pylorus and other juncture points of the bowel. Pirie believes that this effect is only deleterious to the pylorus and that excessive adrenalism, resulting from the failure of the suprarenal medulla to diminish normally, is the stimulus which brings on hypertrophy and stenosis. He also contends that the secretory stimulation of the pancreas is inhibited by excessive adrenalism and that the lack in pancreatic secretion delays the neutralization of the acid chyme from the stomach causing the pylorus to remain closed for an abnormal length of time, which in turn produces gastric retention and hyperacidity followed by pyloric hypertrophy. This process, Pirie believes, results in a vicious circle. Gray and Reynolds supporting the hyperadrenalism theory of Pirie contend that, if adrenal secretion is antagonistic to pancreatic secretion, deficiency in pancreatic digestion should exist if the theory is to hold good. This they believe is supported by their observation that persistent fatty diarrhea has existed in a large proportion of their cases after operation. In fact, fifteen per cent of all their deaths they ascribe to this factor alone. Thus it is evident that the causative factor is not

yet clear and only the continued study and recording of cases will reveal the etiology.

The present case, B. H. (U. H. 31,522) 25 years old, colored, female, married, house-maid; was admitted to the University Hospital on September 24, 1923, complaining of nervousness, loss of weight, loss of appetite, nausea, vomiting and epigastric pain. She was well, carrying an average weight of 192 pounds, until the onset of the present illness which began in December, 1922, with loss of appetite affecting all foods alike. This distaste for food continued without other symptoms save for gradual emaciation until July, 1923, when acute epigastric pain developed which was neither relieved or aggravated by taking food but was associated with marked nausea and irregular attacks of vomiting. The vomiting was apparently caused by taking food, though the intake of fluids or solids were equally effective in producing it. Two weeks prior to admission she began to have jerky movements of her face associated with difficulty in speech, the latter consisting in difficulty in the formation of words. Later some jerky movements occurred in all her limbs. Headache had persisted during the previous month. Constipation has been present since the primary onset of illness.

On admission she was markedly emaciated weighing 83 pounds. There were fine intermittent tremors of head, especially involving the lips, difficulty in speech and slight protrusion of eyeballs. Save for the marked prominence of the bony landmarks the thorax was normal. The abdomen was symmetrical, retracted and no masses were noted, though some epigastric tenderness was present. Her skin was dry, scaly and showed a sharply defined non-symmetrical discoloration or pigmentation about the elbows, knees and mouth. Her reflexes were generally hyperactive but none were abnormal. The laboratory reported her urine to show a specific gravity of 1020, a trace of albumin and a few granular casts. Thirty-two per cent of phenolphthalein was eliminated from her kidneys in two hours and the non-protein nitrogen fraction of her blood was 54.5 mg. per 100 cc. Her blood showed 4,300 white cells, 3,409,000 red cells and 55 per cent of hemoglobin. The following day, September

25, 1923, a large tumor mass was noted in her epigastrium.

She was seen in consultation on September 26, 1923. We noted the marked emaciation, the general semi-catatonic attitude, the twitching of the facial muscles which became an ugly grin until words came when the face relaxed. The abdomen was scaphoid and no masses were felt. I expressed the opinion that the stomach under the fluoroscope would show only large capacity and atonia, and that the facial contortions were a tetany of mild order due to gastric retention. The history of loss of appetite, vomiting, indefinite pain associated with nervous phenomena suggested anorexia nervosa, and a basal metabolic rate was requested.

On the 27th of September a gastric test meal showed an absence of hydrochloric acid, and the presence of lactic acid associated with no abnormal findings in the microscopic examination. The roentgenological study showed a huge, rather atonic stomach with scanty filling of the bulb and an almost complete five-hour retention (Dr. Holmes). On the 28th of September her basal metabolic rate (Benedict-Sanborn) was plus 4%. The blood Wassermann reaction was reported moderately positive, 2 plus.

In spite of the normal basal metabolic rate, the therapeutic test of thyroid medication was advised and on the 29th of September she was placed on thyroid extract ten grains three times a day. Also, because of the positive Wassermann reaction, potassium iodide in increasing doses together with mercury salicylate one grain every five days were given. Improvement was noted shortly, the tremors and twitchings of the face ceasing, the speech becoming normal and the vomiting lessening, occurring only every two to three days. On the 12th of October her basal metabolic rate reached plus 32% and the thyroid medication was stopped. On the 15th of October I noted, in addition to the disappearance of her nervous manifestations, that her skin was moist and that a marked improvement had taken place in her general condition, though no gain in weight had occurred. Her stomach showed marked hyperactivity with a diffuse sensation of thickening.

ing about five centimeters proximal to the pylorus. My impression was that pyloric stenosis existed, probably, because of the positive Wassermann reaction, due to a diffuse syphilis of the stomach. Exploratory operation was advised because of the persistent retention manifested by recurring vomiting.

On the 16th of October, 1923, her abdomen was opened through a high right rectus incision. The stomach was moderately dilated and about the pylorus there was a firm thickening encircling the pylorus for a distance of about four centimeters, the thickening not involving the serous coat. This contracted the pyloric opening to such an extent that the tip of the little finger could not be passed through. An incision five centimeters long was made through the pyloric ring in the longitudinal axis, one-fourth of the length being distal and three-fourths proximal to the pyloric ring. A thick dense fibromuscular ring of tissue was found closing the pylorus to a diameter of about five millimeters. At the proximal end of the incision at a distance of about one and five-tenths centimeters from the true pylorus a second circular fibromuscular band was found constricting the lumen of the stomach to a diameter of about eight millimeters. The proximal end of the incision was lengthened about two centimeters cutting through this band which was found to lie entirely between the mucosa and the submucosa and did not appear to have any intimate connection with the overlying muscular coats. The incision in the stomach and duodenum was closed in the opposite direction in the manner of a Horsley pyloroplasty by two rows of catgut sutures. The appendix was removed secondarily and showed a slight subperitoneal fibrosis. Recovery was uneventful, food by mouth being withheld for seventy-two hours during which time the patient complained bitterly of hunger. Her wound healed by first intention and she gained fifteen pounds by the tenth day after operation, when she was discharged. Six weeks later she weighed 135 pounds and was at work as a helper in a steam laundry. One year later she was accepted as an excellent insurance risk, being free from symptoms and weighing 162 pounds.

In review, a few facts in respect to this case are of interest: the extreme pre-operative emaciation; the peculiar nervous manifestations and their relief following thyroid medication; the type of pyloric defect; and the rapid recovery and gain in weight following relief of pyloric obstruction. Conclusions drawn from single cases usually are ill founded, but the marked, though incomplete, relief from thyroid medication in this case may tend to indicate some relationship between endocrine disturbance and pyloric obstruction, thus indirectly supporting the theory advanced by Pirie.

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DISCUSSION ON PAPER OF DR. CHANEY

Dr. William R. Dancy, Savannah: I want to thank Dr. Chaney for his able presentation of this subject and for his splendid study of his case, and I am sure the membership of this Association is highly appreciative of the excellence of his work. I want to congratulate him upon his courage in presenting a type of case in which others have found so much difficulty in convincing the profession of their diagnosis.

The subject of "Congenital Pyloric Stenosis in the Adult," is within its title almost a contradictory one. A study of the condition in infancy rather convinces us that the chances are rare for a human to survive it until adult life without operative interference. However, there is evidence to be had from reliable sources which supports the belief that a few cases of true "Congenital Pyloric Stenosis in Infancy" do reach even well into adult life. These few, however, are less than published reports indicate. It is a very striking fact that the majority of published reports are of cases discovered at autopsy and furnishes us with insufficient clinical data. Such is the true status of the ten cases reported by Landreder in 1879 and the thirty-one cases reported by Maier in 1885 (found at autopsy). There is only meager clinical data of these cases.

When the clinical cases reported as "Congenital Pyloric Stenosis in the Adult" are studied in detail, most of them show a cause or lesion which removes them from the congenital group. This status is applicable to the seven cases reported in 1904 by Maylard. After analysis, most of them were found to be definitely due to duodenal ulcer.

One good case of Congenital Pyloric Stenosis in a boy eleven years old has been described by Mayo Robson and Moynihan in 1904 in their text book (on Surgical Treatment of Diseases of the Stomach). They have also reported one doubtful case.

It is a noteworthy fact that since the analysis of Maynard's cases and other cases also since then (1904) there has been a paucity of literature on the subject, indicating the great infrequency of these cases which presented clinically the classical picture of "Congenital Pyloric Stenosis in the Adult."

Recently Dr. Burrell B. Crohn, of New York, has presented a case in a woman, forty-five years old, which evidently is a true case of "Congenital Pyloric Stenosis in the Adult."

Dr. Crohn's case gives the following classical picture:

History of frequent attacks of copious vomiting. The vomitus was very abundant, forceful and contained food residue. On inquiry, the fact was elicited that the attacks of vomiting had occurred during her entire lifetime, even in infancy. The patient apparently suffered little from continuous state of gastric distress.

Gastric lavage: Fasting stomach, showed food residue of several days and many yeast cells.

X-ray showed typical Pyloric Stenosis with marked motility delay.

Nature of pyloric obstruction in doubt, apparently benign.

Wassermann negative.

At operation: typical appearance of "Congenital Pyloric Stenosis in Infancy," except in much larger form. The appearance of the pyloric segment, the exaggerated muscular hypertrophy and the gastric dilatation are typical of this condition. This was presumably an unusual case of congenital hypertrophic pyloric stenosis of infancy which had been carried into late adult life. Gastroenterostomy was followed by cure. After operation there was a complete relief of symptoms.

Although I feel that Dr. Chaney has correctly diagnosed his case, it lacks some of the clinical characteristics of a typical case of Congenital Pyloric Stenosis in the Adult, in that the history does not date from infancy,

no peristalsis is visible and no tumor mass is palpated.

The case definitely shows stenosis and many symptoms that go with it.

One of the differential points in the diagnosis, between "Congenital Pyloric Stenosis in the Adult" and "Atony with Spastic Pylorus" is that the later has no palpated tumor and generally some prolapsus, while the former may have a palpated tumor. Bassler lays stress on thickening of muscular tissues and of the mucous membrane of the pylorus and a palpated tumor mass.

If I understood Dr. Chaney correctly, this was the first and only attack of gastric distress that the woman had experienced; and that in this attack general conditions of headaches, nervous phenomena and disturbances of the stomach all improved under antisyphilitic medication and thyroid extract. Dr. Chaney prefers to give credit to the thyroid extract for this improvement. It would seem to me, however, that as the patient, a negro woman, had a positive Wassermann and was given, along with the thyroid extract, salicylate of mercury hypodermically and potassium iodide by mouth, that the improvement was due to the antisyphilitic treatment rather than the thyroid extract. It would appear as quite probable that syphilis was the cause of the nervous phenomena of the patient and the cause at least in part of the contracted condition of the pylorus. I am sure Dr. Chaney has studied this case with great care and I would be interested in having him clear up these confusing features. I would also ask if he considers this a case of "Congenital Pyloric Stenosis in the Adult" with "Congenital Syphilis" as the underlying cause.

Dr. Ralph H. Chaney, Augusta (closing the discussion): I want to thank Dr. Dancy for the discussion because it certainly shows that he read the paper that I presented before he came down here and that is a compliment to anybody. I recognize the basis for criticism that Dr. Dancy makes in this particular instance. I am not saying that the improvement that took place in this particular case was entirely due to thyroid medication. Perhaps other things had some effect. I was simply bringing out an illustration that in certain cases Pirie's contention might be correct. The previous history of this girl was hard to go into, because she gave no history of dyspeptic symptoms eighteen months prior to operation. She had a year of symptoms and six months of active symptoms. Subsequent to the thyroid and other medication she had definite symptomatology that went with pyloric obstruction. She had a nodular mass proximal to the pylorus, which was not felt earlier in

the history. She had the same dense muscular thickening and a distinct muscular band encircling the pylorus as we see existing in a congenital stenosis. I do not believe it is possible for that to develop as a secondary condition and that it must have existed there as a congenital defect. I believe this represents a case of true congenital disease of the pylorus existing through adult life.

THE USE OF THE D'ARSONVAL CURRENT IN THE REMOVAL OF TONSILS*

JULIAN BUFF, M.D.

Atlanta

D'Arsonval current was discovered back in the early nineties but was not used extensively, until after the World War. Since that time it has been used more each year.

This is a low voltage current and very high milliamperage, and the same as most other currents has a positive and negative pole, which does not really matter which pole you use but, for description I designate positive and negative poles.

The current was used in the removal of tonsils several years ago by Cottle and Hollender of Chicago. Since that time several men have used it throughout the United States. Sooner or later it has been abandoned and the operator returning to the old methods of removing the tonsils.

These men used it in this way. They placed the positive electrode on the abdomen and then with some form of insulation for the snare wire of a Beck instrument, which formed the negative pole, the tonsil was pushed through the loop, and held taut while the current was turned on until the tonsil was removed, using about six hundred milliamperes of the current.

This method was abandoned for the reason that it caused too much tissue coagulation at the lower pole, and in the tonsil fossa, for the reason that the current traveling from one electrode to the other, does not pass out of the upper part of the wire which is the negative electrode the same as it does

out of the lower part, on account of the density of the tissues not being the same, as a current passing out of the upper pole of the wire has a much greater distance to travel than that which passes out of the lower pole.

We know that the tissue coagulation is caused by the resistance the tissues offer to the current.

This causes first a destruction of the tissue of the superficial layers and then there is a devitalization of the tissue for several layers deep in the tonsil fossa, which later sloughs out giving rise to an occasional hemorrhage due to the fact that the blood vessels have been opened by the sloughing.

This sloughing and secondary hemorrhage occurs from the fifth to the tenth day, when this occurs there is always a severe pain and dryness of the throat and sometimes the pain is almost unbearable. The time required in healing is prolonged about fifty per cent. Scar contractions afterwards were more prevalent than in the ordinary method of removal. In this method of removal the current was passed through the body and not through the tonsil alone. The pathological reports of various men stating that the tonsil was coagulated only a few cells deep are all true but the current did not pass through the tonsil. It passed through the tonsil fossa and this was not examined to see how much tissue destruction there was. The tonsil was a non-conductor and the current always passes from the side of the electrode nearest the other one.

No one has reported the tissue destruction of the tonsil fossa which I know was enormous and for this reason this method has been abandoned. It occurred to me some months ago, that by making a veder loop with a detachable metal tip, the shaft part of the instrument being insulated, that the tonsil could be engaged more easily than with a tip made of hard rubber, or a metal tip covered with rubber, for insulation as these forms of loops are bulky and require considerable force to engage the tonsil, thereby causing injury and trauma to the surrounding tissues, besides leaving parts of

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the tonsil, and danger of not being well insulated, which may cause a deep burn in the throat. This instrument with the detachable tip has proven very satisfactory.

The method I use now and which I will describe, has proven to be the most satisfactory way of removing tonsils, whether it is used with local or general anesthesia.

For General Anesthesia

The patient is anesthetized in the ordinary way and the cone and ether removed from the room. The mouth gag placed in and the tonsil engaged in the detachable loop which has been previously described and the detachable ring removed from around the tonsil. This leaves the tonsil caught in the wire loop, a number 4 wire preferably, of a Beck instrument with the wire insulated down to the tonsil with hard rubber.

The negative wire of a high frequency current machine is attached to the Beck instrument and then the tonsil is caught with a pair of insulated forceps except the tip which serves as the positive pole and then the current turned on with a foot switch and the wire in the Beck instrument pulled taut until the tonsil is removed, which requires about three or four seconds, using two or three hundred milliamperes of current. The opposite tonsil is removed likewise. For local anesthesia the tonsil is injected and the operation proceeds in the usual way.

With this way of removal the tonsil fossa should be a glistening red surface with white dots about over the field which are the ends of scar and connective tissue which held the tonsil in the fossa. The blood vessels are seen coursing along the fossa and where they crossed into the tonsil the ends are sealed instead of bleeding and they are filled with blood up to the ends that are sealed. With the old way of putting the positive electrode on the body the tonsil fossa looked perfectly white and the tissue is badly burned. The pain afterwards is not as much as in the ordinary tonsil operation, due to the fact that the clamping of the tonsil fossa and the tying of sutures in the throat has not been done as these cause pain and are avenues of infection.

Bleeding does not occur and the tonsil fossa are left absolutely dry, when the oper-

ation is done properly.

Healing is quicker for there are no sutures to slough out.

Scar tissue and contractions are not present afterwards as with the electrode on the abdomen for you do not have the large areas of devitalized tissue to slough out. They are less than with the use of the ordinary instrument, especially when you have to use sutures, as each suture put into the throat causes more scar tissue. Some men seem to think the more sutures you put into a tonsil fossa the better operation you do, as a matter of fact the more you put in the more soreness, scar tissue and more liable to secondary hemorrhage you are.

Sealing of the lymphatics by this method in my opinion and the opinion of others is an important factor preventing the influx into the system of toxins that frequently follow the ordinary operation and sometimes causing lung abscesses as it has been proven that the patient gets the abscess from the blood stream rather than from aspiration.

In general anesthesia only about one-fourth the amount of ether is used. The patient is greatly benefited by this as only one case in ten will be nauseated, and when they do vomit after the operation they do not vomit any blood whatever, and are usually awake by the time they return to the room. Relatives as we all know surround the beds in southern hospitals and they are not worried unless they see the patient vomiting blood.

The ease with which the tonsils are removed this way, has to be considered, as it is very easy to remove tonsils without blood and the operator is not tired after a series of cases. The patient is awake when the operator leaves the hospital and that it will not bleed is a comforting factor for the operator to know.

All the literature you see on the removal of the tonsils with the high frequency current, deals with the positive pole somewhere on the body other than the tonsil itself, and in this way you get the tissue coagulation in the tonsil fossa and this method I cannot too strongly condemn, for reasons previously stated.

Operators who are beginners should not try this method, in fact no one who is not

adapted to the use of the Beek instrument and uses it with marked rapidity. We must know also the fundamentals of electricity and be thoroughly familiar with the diathermy machine, although the amount of electricity used would not cause serious injury to the patient should one make a mistake.

Much discussion has occurred as to the probability of an explosion from the ether. This method has been used on thousands of cases and no explosion has been reported, and if one should happen it will be due to the carelessness of the operator.

Advantages over the old method are the following: Absence of blood; sealing of the lymphatics; less pain following the operation; less danger of secondary hemorrhage; faster healing; less scar tissue; less nausea when ether is used; less tiring to the operator.

After trying several high frequency machines I find that the Victor is the best because the current can be more easily regulated and the current is the smoothest.

I wish to say before closing that a great deal of my success with diathermy has been due to my good friend, Dr. E. S. Byrd of Atlanta, who has prompted me in its use.

Any variation from the method I have described, will cause one trouble one way or the other. This has been used successfully on a large number of cases.

I ask you, gentlemen, since we live in an electrical era, not to hastily condemn it, but to investigate, for medicine will come in for its share of electricity the same as commerce. 749 Hurt Bldg., Atlanta, Ga.

Other discussions omitted by Official Reporter on account of other engagements.

CALHOUN LECTURESHIP

Additional subscribers to the Abner Well-born Calhoun Lectureship Fund. The first list appeared in the January Journal.

| | |
|--------------------|--------------------|
| Anderson, W. W. | Oppenheimer, R. H. |
| Barrow, Craig | Smith, J. M. |
| Boland, F. K. | Stampa, S. |
| Elrod, J. O. | Teasley, B. C. |
| Gholston, W. D. | Thompson, D. N. |
| Lattimore, Balston | |

SYPHILODERMATA*

HOWARD HAILEY, M.D.

Atlanta

Osler placed syphilis as the foremost cause of death from medical diseases. Apparently this estimate is too high but when statistics are analyzed the results substantiate the claim.

Syphilis is as great a problem today as it ever has been in the past. Neither diagnosis nor treatment is always a kindergarten affair.

Many patients, especially women, truthfully do not know when they contracted the infection. In men, gonorrhea or chaneroid frequently obscures the primary lesion while in women, it is most often concealed in the vagina. Extra-genital chancre is usually diagnosed as a pimple, fever blister or ulcer.

Some early eruptions are easily recognized. The macular type is often overlooked, especially when viewed closely or in a bad light. The follicular eruption is another elusive type.

The seborrheoid, lupoid and psoriasiform types are the most deceitful of the late eruptions. Occasionally, a syphilid is mistaken for a dermatitis due to occupation or external irritants. Recently, a young woman was referred to me, complaining of a swollen, scaly, fissured lip. On first examination, she apparently had a tooth-paste dermatitis. Her Wassermann reaction was strongly positive. This led me to change my diagnosis to syphilitic cheilitis. The condition vanished following treatment.

The gumma may manifest itself as a paronychia, abscess, carbuncle or puzzling ulceration. Sometimes, it simulates tuberculosis, blastomycosis and cancer.

In the management of syphilis, it is of the utmost importance to secure a good family and personal history. Ask particularly about marriages, health of other members of the family, deaths, stillbirths and miscarriages. Do not fail to note complaints of rheumatism, sciatica, neuritis, pain in joints, tenderness over long bones, backache, headache, eye trouble, stomach trouble, etc.

*Read before the Medical Association of Georgia, Athens, Ga., May 13, 1927.

Ask about old sores, ulcers, scars, boils and carbuncles. Learn if there has been loss of hair, skin eruptions, hoarseness, loss of voice, deafness, frequent sore throat and ulcers in the mouth. Ask him if he has had clapp, a sore on the penis or kernels in the groin. Many patients do not have the terms gonorrhea and chancre in their vocabulary. After the history is secured proceed to the examination. (In many cases it is best to examine the patient first, then secure the history.)

Place the patient in a good light, paying proper attention to draping when the patient is a woman. Inspect the entire body, especially the mucous membranes. Look for loss of hair, distorted nails, skin eruptions, tumors and scars. Note the thin, atrophic, circumscribed, non-contractile scar with hyper-pigmented border.

Palpate scars, lesions and lymph nodes. Test the reflexes. Note the gait. Auscultate the heart. Record the blood pressure. Examine the urine. Secure blood for a Wassermann test. When indicated, withdraw spinal fluid for examination.

There is not a superfluous procedure in the above outline and when applied to all patients presenting unusual skin manifestations, many masquerading syphilids will be revealed.

In late skin syphilis the cardinal points of diagnosis are: 1. Fewness of lesions. 2. Usually limited portion of body affected. 3. Superficial or deep induration. 4. Degree of inflammation out of proportion to the gross appearance of the lesion. 5. Lesions arranged in circles, ovals or curved lines. 6. Ulceration, with tendency to heal slowly from simple dressings. 7. Atrophy following healing without ulceration. 8. Associated thin, punched-out scars with hyper-pigmented borders.

It is probably not an exaggeration to say that half of the cases of late skin syphilis give a negative blood Wassermann reaction. If your examination leads to a diagnosis of syphilis, in the face of a negative blood report, give the patient the benefit of the therapeutic test. Do not rely on mixed treatment or protoiodid pills as the diagnostic drugs.

Use the old-fashioned mercury rubs or bismuth or mercury intramuscularly because there are other puzzling diseases of the skin which respond beautifully to the arsphenamines. The writer has seen many gummas of the skin, with negative Wassermann test, fail to respond to mixed treatment, while improvement was immediate following the use of stronger treatment.

When the percentage of diagnoses of early syphilis is increased, the patient induced to take sufficient treatment and the importance of observation realized by the patient, then, we will control syphilis.

Remember, in syphilis as in other diseases, the sum total of clinical evidence is a greater quantity than that of the laboratory.

I now wish to show you a few lantern slides which illustrate the resemblance of syphilis to other diseases of the skin.

803-4 Candler Bldg.

DISCUSSION ON PAPER OF DR HAILEY

Dr. H. R. Slack, LaGrange: I enjoyed hearing Dr. Hailey's paper and seeing his splendid lantern slides.

Syphilis, as Dr. Osler used to tell his class, is protean in its manifestations and may simulate any disease from mumps and measles to lupus and leprosy. Fortunately for suffering humanity the discovery of the spirochæta pallida or treponema pallidum and Wassermann's reaction enables us now to differentiate it from the various skin lesions. The use of salvarsan in treating the early manifestations of this dread disease has greatly reduced the number of these cases. The clouds are dark, but they have a silver lining, as arsenic, mercury and the iodides are potent weapons in fighting the pernicious disease, that sometimes drags its slimy trail through several generations. Particularly dramatic are your results in treating syphilitic keratitis and iritis, when you can literally make the blind to see and these cases are usually inherited.

Other discussions omitted by Official Reporter on account of previous engagements.

DE SOTO HOTEL, SAVANNAH
Headquarters
MEDICAL ASSOCIATION
OF GEORGIA
May 8, 9, 10, 11, 1928

SUPRA-CONDYLOID FRACTURE OF ELBOW*

GRADY N. COKER, M.D.
Canton

Fractures of the elbow are very common especially among children. In this paper I shall confine my remarks to fractures of the lower end of the humerus with special reference to treatment of the supra-condyloid type, and to a tabulation of the fractures we have treated during the past three and one-half years, just to show the frequency of injured elbows. A review of the anatomical growth will not be amiss.

In the infant the lower end of the humerus is cartilaginous. The secondary centre of ossification appears for the capitellum and lateral part of the trochlea the second or third year, and this is followed by the centre for the medial epicondyle about the fifth year. During this period the diaphysis grows distally separating the medial epicondyle from the rest of the epiphysis. Centres appear for the lateral epicondyle and remainder of trochlea during the eleventh and twelfth years. These three lateral centres of ossification fuse with one another at thirteen or fourteen, forming a true epiphysis which joins the shaft between the sixteenth and seventeenth years.

The medial epicondyle epiphysis joins the diaphysis about one year later between epiphysis and diaphysis. The actual line of union corresponds to the proximal margin of the articular cartilage. The capsule of joint is attached around lower end of the humerus just below the epicondyles and proximal part of the coracoid and radial fossa, and posteriorly to floor of the olecranon fossa. The distal end of the humerus is weakened by the grooving of the trochlea and by the olecranon and coracoid fossa. It has to withstand force transmitted through the forearm from falls upon the hand and in consequence fractures in this situation are very common.

In children the injury may take the form of a separation of the distal epiphysis of the

humerus. The adult type of supracondylar fracture of the shaft frequently radiates into one of the fossa, giving rise to the so-called T or Y fractures.

Fractures in the vicinity of the lower end of the humerus are due to indirect or direct violence. These occur often in children. The rule is that when a child falls on an outstretched hand, due to force of violence transmitted through the forearm and hand, a fracture usually occurs near the elbow; whereas in adults the fracture is most often called a *colles* or near lower end of radius and ulna. A review of the anatomical growth of an elbow explains the reason for the prevalence of injuries in this area among children. Adult elbow fractures are most often due to direct violence.

DIAGNOSIS

Injured elbows very rapidly become swollen; so a diagnosis of the exact type of fracture in this area is very often difficult. Careful examination should be made to locate whatever displacement of the bony landmarks is present. In supra-condyle fractures the lower end of the upper fragment can be felt projecting forward, and the lower fragment as a rule is displaced backward. It is just this type of fracture that is so often mistaken for a dislocation, leading to bad reductions, bad results and suits for malpractice.

In epiphyseal separations and dicondylar fractures this displacement is less marked. Internal or external condyle fractures are easily diagnosed because of the superficial parts. After a thorough physical examination of the injured elbow, an X-ray picture should be made to determine whether or not one's diagnosis is correct and to show the exact displacement, if any, of the fractured fragments. The X-ray should not be depended upon alone, because important points are to be gained from gentle palpation of an injured bone in treatment.

TREATMENT

Accurate reduction, with a good anatomical and functional result, should be the chief aim in the treatment of any fracture; and, if possible to do an accurate reduction with a good anatomical result, then get the best functional result possible.

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The consensus of opinion at the present time among the authors of books, abstracts and papers, is that fractured elbows, with the exception of the olecranon, are best treated by flexion to a right angle or acute.

Ashurst did a lot to popularize treating these injuries by the flexion method in 1910. Since that time this method has become more or less standard, with many variations in the type of splint or dressing required to hold immobilized flexion.

In reduction whenever necessary we use ether anaesthesia. We never allow chloroform to be used in any kind of bone work. Gas anaesthesia is probably best. Ordinarily in reducing a supra-condyloid fracture we use hyperextension, then flexion holding lower fragment backward, which, at the same time, acts as a fulcrum to the flexed forearm which pulls the lower fragments in place. Supination at the time of flexion is advantageous but not always a necessity. Our reduction is checked by an X-ray picture, taken lateral, and anterior, posterior.

During the past three and one-half years, we have been using in our treatment of the supracondyle type of fracture, hyperflexion, but keeping this position by tying the hand of the patient to neck, allowing the forearm, arm and elbow to be denied of any adhesive strips, metal, plaster paris or wood splints. We believe the advantages of this method to be:

(1) It holds hyperflexion, while the tendinous expansion of the triceps muscle holds the fractured fragments in place.

(2) It prevents any injury from pressure to the nerve trunks.

(3) It allows a certain amount of lateral motion from the body by the elbow of patient, which gives rest from immobilization.

(4) It prevents chafing and heat irritation of arm pits and elbows.

(5) It is an advantage in starting early passive motion, since the sling is untied and after exercise tied back in place as long as needed.

After ten days of immobilization, we start passive motion twice daily, and instruct the child's parents how to carry out this treatment. After third week, we turn the forearm loose and start active motion, by allowing

the patient to carry weights or lift different kinds of light objects. We do not claim anything new in this form of treatment, since English doctors have been using it for years and it is very popular with them. Somehow or other it has not become so popular with our medical colleagues.

FREQUENCY OF OCCURRENCE

During the past three and one-half years, we have treated the following fracture cases:

| | |
|-------------------------------------|----|
| Tibia and fibula..... | 26 |
| Fibula alone | 4 |
| Tibia alone | 9 |
| Pott's fracture of ankle..... | 5 |
| Femurs | 15 |
| Acetabulum | 7 |
| Pelvis superamus of pubic arch..... | 2 |
| Patella | 3 |
| Os calcis | 2 |
| Tarsal bones | 2 |
| Metatarsal bones | 5 |
| Spine | 3 |
| Skull | 7 |
| Clavicle | 8 |
| Mandible | 4 |
| Humerus upper end..... | 9 |
| Ribs | 15 |
| Terminal phalanges of hand..... | 10 |
| Terminal phalanges of foot..... | 5 |
| Sesamoid bone of foot..... | 1 |
| Colles fracture | 35 |
| Radius | 7 |
| Olecranon | 3 |

We have treated thirty-six injured elbows consisting of the following varieties:

| | |
|--------------------------------|----|
| Supra-condyloid fracture | 27 |
| Epiphyseal separation | 2 |
| Olecranon | 3 |
| Medial epicondyle | 3 |
| Capitellum | 1 |

Fractures in this region are most often the supra-condyloid type, and are only superseded in frequency by Colles' fracture.

Twenty-one of our cases were dismissed with good results, having complete flexion, complete extension, full supination and pronation. In four cases the results were fair with slight limitation or flexion or extension, incomplete pronation or supination, and one gunstock deformity. This case had a very good functional result. Two cases were dismissed with bad results and these were T

fractures of the supra-condyloid type, one a patient of eighteen years of age, and the other thirty-six years of age. The later was seen in consultation and had a Volkman's contracture which was due to being placed in a tight bandage with angular board splint. The other case has an ankylosed elbow at right angles with fairly good supination and pronation. Neither of these cases were treated by the sling method.

DISCUSSION OF METHOD USED

Jones of Liverpool was probably the first to advocate the method we have been using. His idea was that splints and bandages are largely responsible for the stiffness which so commonly ensues upon an elbow injury. He advocated treatment by supination and acute flexion in all elbow injuries except fracture of the olecranon. Acute flexion forces the fragments into place and holds them firmly between the coracoid process of the ulna, the Trochlea surface of the ulna, the fascia, and the triceps tendon.

This flexion is easily maintained by fastening a bandage around the wrist and neck. The ball of the thumb should rest against the neck. The bandage around the neck, should pass through a rubber tube or over a pad; either of which serves to protect the neck. We observe our cases daily during the first few days, if possible to get the patient back for observation.

Passive and active motion after started are advocated daily until the injured elbow has nearly perfect flexion and extension, full supination and pronation. Most of our cases have about three months' observation.

AGES

The youngest patient treated was three years of age, and the oldest thirty-six years. Our next oldest was sixteen. Both of the later were T fractures. The average age of the typical supra-condyloid cases was eight years.

CONCLUSION

(1) An accurately fixed, accurately reduced supracondyloid fracture, will hold itself in place, provided flexion is maintained; so why any need of splints and a lot of bandage. A simple sling is all that is needed.

(2) We have treated twenty-five cases by this method, twenty-one were dismissed

cured, and four with fair results. Our percentage of cures was 84%.

(3) We believe that early passive motion was a big factor in our results.

(4) Our series of cases is too small to draw any definite conclusions, but large enough to make a few well worth while observations.

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Balance Bibliography omitted for lack of space.

DISCUSSION ON PAPER OF DR. COKER

Dr. Theodore Toepel, Atlanta: Dr. Coker's paper is so full of interesting suggestions that I deem it a pleasure and an honor to say something commendatory on it. It is so seldom that these measures as advocated by Dr. Coker in such a complete manner are brought to the attention of the general practitioner. It is unfortunate that so many of the general practitioners and even some of the specialists follow the path of easiest resistance, namely, put the arm up in a cast and let it go at that and trust to luck that the child will come out with a well functioning elbow. That will not take place. As he pointed out so well, it takes observation and close observation and daily inspection instead of the former come back in a week, or come back in three weeks or come back in a month and I will see how you get along. It requires more time and it is that time problem which is so repulsive to many of us. We should remember that a child has its whole life before it and for a child to go through life with a bad elbow or a reduced function in the elbow is a handicap. I want to congratulate Dr. Coker on the excellency of his paper. As he said so well, what we wish to obtain is a good functional result with no anatomic deformity. I approve of everything he recommends. His method of treatment has been recommended before this Association at a previous meeting and I am glad it is gradually getting the necessary attention.

Dr. Grady N. Coker, Canton (closing the discussion): I wish to thank Dr. Toepel very much for his excellent discussion. Just a few things to be emphasized in the treatment of an injured elbow. I heard one doctor state yesterday that in fractures in children, turn them loose and let them go and you will get a result. Do not believe that because some of the worst results we get are due to lack of observation and careful watching of the patient. As a rule we used to wait two or three

weeks before starting passive motion. I believe that early passive motion is one of the best things we can do. The bone is cartilaginous in children and we can start early motion to do away with muscle stiffness. Another thing is the treatment of fracture of the elbow is this, know your anatomy, know the development of the elbow because the elbow in children is the last of the ossification centers. It is a growing elbow and unless you are familiar with the anatomy, you are likely to make a mistake in diagnosis and also in the observations of your misplaced fragments.

SUBDIAPHRAGMATIC ABSCESS WITH SUGGESTIONS FOR PREVENTION*

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Atlanta

The history of subdiaphragmatic abscess is of special interest, by reason of its late occurrence, in medical literature. The first clinical diagnosis was made by Barlow as late as 1845. It was not until 1880, that surgical interference was attempted. Up until that time, the condition was of interest, only to the pathologist. The first autopsy was reported in 1824¹. This is probably explained by the great difficulty experienced in diagnosis, before the time of accurate diagnostic methods.

ANATOMY

For all practical purposes, a subdiaphragmatic space may be defined as any cavity, which has the under surface of the diaphragm as one of its walls, but for a comprehensive study, a brief review of the gross anatomy is necessary. The subdiaphragmatic space is divided, by the coronary ligament, into an anterior and posterior space. These, in turn, are subdivided, by the lateral ligaments, into the right and left anterior and posterior spaces. All of these are intra-peritoneal. In addition there are two extra-peritoneal spaces. These are the spaces between the folds of the coronary ligament and around the upper pole of the left kidney. For clinical purposes, it is probably best to think of the subdiaphragmatic space in terms of an anterior and posterior space. Abscesses of the anterior spaces give rise principally

to intra-abdominal symptoms, while abscesses of the posterior spaces give rise to thoracic symptoms.

PATHOLOGY

The cause of subdiaphragmatic abscess, as studied by Lance, (1909), in an analysis of one thousand cases, indicates that about twenty per cent are caused by appendicitis; thirty per cent by lesions of the stomach and duodenum; thirteen per cent by lesions of the liver or gall bladder, and the remaining thirty-seven per cent by miscellaneous conditions, of the pancreas, spleen, large intestine, pleural and other organs. In a study of two thousand and four hundred cases of appendicitis, operated by Dr. John D. Weaver, subdiaphragmatic abscess occurred twenty times².

The modes of infection from appendicitis were described as: first, the result of gravity. (This is encouraged when the patient is allowed to lie prone on the back. The mass muscles of the right lumbar region produce a ridge, and, as the result, there is established two planes of drainage. One drains downward into Douglas' pouch, in the female, or the recto-vesical pouch in the male, and the second upward into the subdiaphragmatic spaces.) The second mode of extension is by continuity along the extra-peritoneal spaces, giving rise to the extra-peritoneal type of abscess. The third, is by extension along the lymphatics of the deep epigastric artery. And the fourth, is by extension through the portal vein. This is followed by a primary hepatic abscess, which may later rupture through to the surface, producing a secondary subphrenic abscess.

In a study, by Esengraff, of one hundred and six cases, the intra-peritoneal variety was present in two-thirds of the number. He records only six abscesses occurring in the left side, due to appendicitis.

The bacteriology of subdiaphragmatic abscess is variable; the organisms found being, the bacillus coli, streptococcus, staphylococcus and numerous anaerobic organisms occurring in their order of frequency. The abscess cavity may or may not contain gas. When present it is due to a ruptured proximal viscus, or a spontaneous gas formation. Gas occurs in approximately twenty-five per cent of

*Read before the Medical Association of Georgia, Athens, Ga., May 13, 1927.

the cases, and when present, is of considerable diagnostic value. This is specially true, when studied by the fluoroscope. The abscess cavity may also contain variable amounts of fluid, resulting from a ruptured viscus, as the stomach, transverse colon or duodenum.

SYMPTOMS

As the pathology of subdiaphragmatic abscess is variable, so are the symptoms, at times confusing, and the diagnosis very difficult. According to Bernard, who reviewed the literature thoroughly in 1908, special attention should be paid to the following points in diagnosis. First, a review of the previous history, carefully correlating the symptoms with the usual causes of the condition, as gastric or duodenal ulcer, appendicitis, hepatic abscess, etc.; second, the character of onset, which may manifest itself as part of the primary lesion, occurring as an immediate post-operative sequelae, or as a late complication. This may be as late as two and one-half years, following the primary suppurative process. This is demonstrated in one case reported by us³. It may rarely occur as a primary lesion. The first two types mentioned are of about equal occurrence. The third point emphasized in diagnosis, is the constitutional signs of sepsis. This is manifested by a low grade leukocytosis with accompanying blood picture of a secondary anemia, which may be accompanied by a low grade temperature with occasional chills, sweats, etc. These symptoms are especially significant, when correlated with the history of some intra-abdominal suppurative process, especially if of the right abdomen.

The local signs or symptoms, are dependent largely upon the location of the abscess. If the abscess is located in one of the anterior spaces, we usually have symptoms of upper intra-abdominal infection; while if the abscess occurs in one of the posterior spaces, we have symptoms more suggestive of a thoracic lesion. It is usually with some lesion, appearing above the diaphragm, that the condition is most often confused. One may easily overlook a subphrenic abscess when concentrating attention on a suspected intra-thoracic lesion. This is probably because post-operative pneumonia is not infre-

quent, and is always looked for when a post-operative case shows symptoms of a prolonged sepsis. Also because of the frequency with which the patients in an early pneumonia complain of abdominal pain.

“As shown by Douglas, the physical signs, usually described, are dullness, flatness, diminished breath and voice sounds, and vocal fremitus, with presence of rales over the base of the lung. The area of dullness is described as being convexed upward and not changing its area, when position of the patient is changed. When air is present, there are three zones of different resonance or percussion—normal above; tympany caused by the gas below this, and an area of flatness below caused by pus, which is continuous with the liver dullness on the right side. When there is also fluid in the pleura, an area of flatness forms the fourth zone, between the pulmonary resonance and the tympanitic zone, caused by gas beneath the diaphragm.” Unfortunately these zones do not usually appear in the order described, and as a result the physical signs are at times very confusing. If the condition has existed for a sufficient length of time, there may be added local manifestations of inflammation, evidenced by localized swelling, tenderness and pain on pressure.

It is usually with the fluoroscope or by X-ray study that a diagnosis is made. This is not only of the greatest importance in making a diagnosis, but it is probably the safest method of determining the best method of approach. Fluoroscopic study furnished the diagnosis in three of the four cases studied by us. This is best done with the patient in the sitting or standing position, when the diaphragm will be seen fixed high in the right or left chest. There is often present some evidence of pathology at the base.

There is seldom a displacement of the liver downward. This has been emphasized as one of the distinguishing signs between a subdiaphragmatic and hepatic abscess. In the latter, there is a downward displacement of the liver.

A final comment is made, relative to the use of exploratory puncture. It is not without its dangers, may be unnecessary, and at times, is misleading. This is well shown in a

recent case reported, by Haggard of Nashville⁴. The exploratory needle revealed pus, which was interpreted as an empyema. At autopsy it was shown that the needle had punctured a subdiaphragmatic abscess.

Death was due to an extensive infection below the diaphragm. It is probably safer not to resort to exploratory aspiration, until a careful X-ray study has been made, and the patient is ready for any operation that may be necessary. The most common complication of indiscriminate exploratory puncture, is contamination of the pleural cavity, which may result in empyema.

TREATMENT

As is true of so many surgical conditions, treatment may be considered under two headings, prophylactic and curative. From two recent clinical experiences, I feel that a great deal may be done towards the prevention of subdiaphragmatic abscess. This is accomplished by a more detailed supervision of the post-operative management, of acute suppurative conditions, of the right abdomen. The condition usually arises from some suppurative process in this location, and if certain principles of drainage were more strictly adhered to, the condition should occur less frequently.

There seems to be a growing tendency for early removal of intra-abdominal drains. While this may be permissible, or even desirable in certain conditions, it is not indicated in the two conditions which most often result in subdiaphragmatic abscess. These are, retro-cecal appendiceal infections, and suppurative conditions in the region of the liver and lesser peritoneal cavity.

At best, the retro-cecal appendiceal abscess is difficult to drain, by the usual methods, and when the drains are removed too early, there is a tendency for the colon to fall back against the parietal peritoneum and adhere, this results in a secondary retro-colic abscess. Later this has a tendency to gravitate towards the subdiaphragmatic spaces, inviting infection. This complication can be met, in a certain per cent of cases, by more copious drains. These should be allowed to remain sufficiently long, for the abscess walls to become thoroughly organized, when there will not be a tendency to shutting off, when

the drains are removed. Indeed, in certain cases, it is well worth while to supplement the anterior drains, by a stab drain through the right lumbar region. This type of drainage is favored by gravity, and is clearly logical in this type of case.

The second precaution to be taken in suppurative conditions of the retro-cecal space, is supervision of post-operative posture. If these patients are allowed to remain prone in bed for a long period of time, there is a tendency for the infection to gravitate upward, toward the right kidney pouch, which favors a subsequent subdiaphragmatic infection. These patients should assume the Fowler's position early. This not only encourages increased drainage, but also causes relaxation of the abdominal muscles, which is an added comfort to the patient with this condition.

In suppurative conditions, in the region of the duodenal fossa or lesser peritoneal cavity, there are certain special problems, of drainage to be considered. These result from the aspirating effect of the diaphragm, during inspiration, and unless infections in these localities are cared for by ample drains which are allowed to remain a sufficient length of time, there is a tendency for septic material to be aspirated into the subdiaphragmatic spaces resulting in abscess.

The active treatment of subdiaphragmatic abscess is necessarily surgical as soon as practical after the diagnosis is made. By the use of fluoroscope and stereoscopic plates, an effort should be made to determine whether the collection of pus is in one of the anterior spaces, or is confined to the posterior spaces. This is very necessary as it will determine the method of approach.

If the abscess is found to be anterior, it is probably best approached by either a marginal incision along the costal margin, or by a high right rectus incision. Every precaution should be taken to protect the general peritoneal cavity from contamination. Tube drains should be introduced and should be removed slowly, care being taken to prevent abscess cavity sealing off and pocketing, the second time. Here again, we have the aspirating effect of the diaphragm to consider, and it is undesirable to pull the drains too

early. A good way is to remove them fractionally, pulling them a little each day.

If by fluoroscopic and X-ray study, it is decided that the abscess involves the posterior spaces, the method of approach should be by one or two procedures. Either by the two-stage trans-pleura route, the incision being over the ninth rib, or by the low incision which is made over the tenth rib.

The low method of approach has recently been elaborated by Osehner, and is ideal in cases suited to it. With this incision, a portion of the tenth rib in the posterior axillary line is removed, the border of the pleura is exposed and is pushed up by blunt dissection, and the parietal peritoneum pushed down. In this way, the subdiaphragmatic space can be entered without danger of contamination of the pleural or peritoneal cavity⁵.

The same precaution can be taken when doing the trans-pleural incision, by resorting to the two-stage operation. At the first operation, a portion of the ninth rib in the posterior axillary line is removed, the pleura is exposed, but not opened, and with a continuous suture, the pleura is sutured to the diaphragm around a certain desirable area. The wound is packed and patient is put back to bed for two or more days. At the end of this time, there will have formed between the pleura and diaphragm, sufficient adhesions to make drainage of the abscess safe. By this method we are able to drain through the lower angle of the pleural cavity without contamination. While in theory, this procedure is not as desirable as the lower incision, it is more practical, in the majority of cases and is the one of choice. After the abscess has been opened, tube drains are placed and the abscess cavity treated as any other abscess cavity, being careful not to remove the drains too soon.

It appears that the mortality rate in cases of subdiaphragmatic abscess is directly proportionate to the duration of the abscess. It ranges from 30 to 56 per cent, depending on whether the diagnosis is made early or late. There is an increase of 15 per cent in cases where operation is delayed longer than seven or eight weeks. This increase, in mortality, is sufficient stimulus to warrant every effort

being made to arrive at an accurate diagnosis. While in some cases, the diagnosis is very difficult, it would probably not be so difficult, if the condition was considered, in every post-operative case, who develops the picture of chronic sepsis. In other words, the condition must be thought of before it can be diagnosed.

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DISCUSSION ON PAPER OF DR. GROVE

Dr. O. H. Weaver, Macon: I am sure we all enjoyed this very elaborate and interesting talk which Dr. Grove has given on this very serious, important, and sometimes neglected condition. I am sure he has covered the subject well and brought out all of the essential features of this condition in a real classical way. I have no criticism or anything to offer more than to approve of his methods.

There were just a few points while he was reading the paper that occurred to me, which he did not mention, and which probably might be well to speak of. One is prophylactic measures which, of course, are always most important in the handling of any condition. Since we know that most of these conditions come about from rupture of some of the viscera, or acute infections, appendicitis, etc., it appears to me that this is another reason why we should stress the importance of operation upon such lesions of the abdominal viscera before there is danger of rupture. For instance, duodenal and gastric ulcers that have been given sufficient medical treatment to test out whether or not they would heal or subside without surgical procedures. If we would insist upon operation of these cases, we would avoid many subdiaphragmatic abscesses.

There is another point the doctor did not mention that has been done probably more as a prophylactic measure in perisymphilitis and in appendicitis work, that is, those cases where we have thrombosis of the veins near the appendix, the ligation of these veins and of the ileocecal veins to prevent the development of liver abscesses or pyelophlebitis. The same would apply to subdiaphragmatic abscess. In the literature on this subject there are reported cases of subdiaphragmatic abscess follow-

ing acute appendicitis even though there was no pus about the appendix at the time of operation. It is not necessarily the suppurative or gangrenous appendix which may occasion these things.

Dr. W. R. Dancy, Savannah: Dr. Grove has presented us with a very excellent subject and one that we should continually keep in mind in doing abdominal diagnosis.

I rise to call your attention to a case which came under my observation many years back while working at Johns Hopkins Hospital. I mention Johns Hopkins because that carries with it a meaning that the case was very thoroughly studied. The case presented the appearance of a malignancy or a chronic infection. Every secretion was studied including the stool in which there were not found any amoeba. The liver was not particularly enlarged. In the x-ray the right diaphragm was not unusually high nor was the right costal angle occluded. In the right lung there was quite a large spherical mass. The question was whether this mass was a malignancy or an abscess. It could not be determined. X-ray after x-ray was studied. The blood and everything relative to the case was carefully investigated in detail. It was decided that in order to ascertain what the lesion in the lung was that an operation should be performed. On the morning of the operation the patient had a very severe coughing spell and something ruptured. The patient vomited about a quart of pus and in this pus were found amoebae, which came from the mass in the right lung. The mass in lung decreased immediately in size, indicating the source of the pus. As soon as the patient recovered from the immediate effects of the vomiting the pus from the ruptured abscess in the lung, an operation was done on the liver and an abscess found high in the liver. It is presumed the amoebae passed through the mediastinum into the lung and produced a secondary infection of the lung. The patient made an uneventful recovery. Left the hospital apparently well. I presume he was kept under observation, but I do not know the ultimate result in the case.

Dr. W. A. Selman, Atlanta: I merely want to call your attention to one procedure after the abscess has been located. As Dr. Grove has said, these cases have been in existence for some time frequently before they are diagnosed. They are deep seated and it takes considerable study and waiting and watching to diagnose them. Sometimes you diagnose them only after going into the abdominal cavity. Of the two cases I have seen, the first one was diagnosed only after I had gotten

into the abdominal cavity with an exploratory laparotomy. I found this area walled off in the margin of the liver and fortunately I found the abscess before I opened into it. I closed the abdomen and made another opening into abscess and drained, therefore protecting my peritoneal coat. I think this is important. If your diagnosis is made only after going into the abdomen, then you can feel where your attachments are. You know where your pus is localized and then you can drain. The other case I saw was evidently a rupture of a viscus of some kind. I do not know whether it was a gall-bladder or a duodenal ulcer or what it was. A man came in with a tympanitic tumor over the upper abdomen and a solid right chest. We did a resection of a rib and drained the chest. Under local anesthetic we opened this tympanitic tumor over the upper abdomen to the border of the liver. On putting the finger in we found there was a large opening which just admitted the finger between these two abscesses. That night this abscess in the chest also ruptured through a bronchus and was discharged through the mouth and upper abdomen. The patient got well. The cause of this abscess I never knew. We drained these abscesses and the patient recovered.

I want to commend Dr. Grove on his series of cases and on his paper so well presented.

Dr. L. W. Grove, Atlanta (closing the discussion): I want to express my appreciation to Drs. Weaver, Dancy and Selman for their very generous discussion.

In advocating constant supervision of the acute abdomen until patient is operated, or is definitely diagnosed; Dr. Weaver made a very valuable suggestion, and one that can not be emphasized too strongly. I think any discussion before a meeting of this type, which advocates delay in the acute abdomen, is a very dangerous doctrine. We are still having brought into Atlanta, and Atlanta is no different from other cities, cases of acute abdomens that have been long neglected, hence, often beyond surgical aid. That we should be more suspicious of every acute abdomen, is evidenced by the fact that the mortality from acute appendicitis today, is higher than it was in 1910.

The case reported by Dr. Dancy is very interesting. I recently had a letter from Dr. Davis, one of our ex-internes, now living in the Canal Zone, in which he told me of a liver abscess which ruptured into the pericardium. Both the liver abscess and pericardium were drained, and patient made a recovery. To my mind this is a most interesting case, and I have written him requesting a more detailed report.

CHORIO-EPITHELIOMA*

REPORT OF AN UNUSUAL CASE

WILLIAM PERRIN NICOLSON, JR., M. D.

Atlanta

Chorio-epithelioma is a neoplasm of malignant type that arises from the epithelial elements of placental tissue. Although the cause of the tumor is unknown, certain significant facts have been deduced, as: (1) It occurs chiefly in multipara, the majority having borne five or more children. (2) The disease yields symptoms a few weeks after abortion in 30 per cent of the cases, after labor in 22 per cent, or following the expulsion of a hydatid mole in 44 per cent of cases. Latent chorio-epithelioma has occurred in some very unusual cases several years after the last gestation.

According to Kerr, the origin of chorio-epithelioma is perfectly definite; it arises from the epithelial layers of the chorionic villi. Although it has been held that the connection of this tumor with pregnancy was essential, a number of tumors have been described where the growths presented the microscopic appearances of chorion-epithelioma, and where there was no history of pregnancy; in fact, not a few cases have been observed in men. In cases where the tumors occurred in a testis, they probably arose exclusively in teratomata, and the chorion-epithelioma tissue represented the trophoblast of the included ovum.

Mrs. V. H. McMichen, white, American, aged 26, was admitted to Dr. Garnett W. Quillian's gynecological service at Grady Hospital on May 19th, 1925. (At this point I would like to express my appreciation to Dr. Quillian for the privilege of reporting this case.) Her chief complaint was "pain in the lower abdomen, more marked on the right side." She had been married, and lived with her husband for eleven years. One child born

July 5th, 1915 lived but a few hours. Six years ago she miscarried a two-months foetus.

Her menses began at the age of 14, flowing regularly every 28 days, and lasting three to four days when young, but lately one to two weeks, the flow being rather profuse, requiring six to eight pads daily. She has no intermenstrual bleeding. She has headaches and abdominal cramping the day before menses appear.

In November, 1924, six months before admission, she flowed profusely for three weeks. Since that time she has menstruated regularly, each period lasting one or two weeks. Last period March 26th. She did not menstruate during April, but about May 1st, began to flow, and has been bleeding off and on since, the flow becoming much more profuse one week before admission. About this time, she began to have pain in right lower quadrant—no nausea or vomiting. Bowels were moving daily. Had had previous attacks of pain in side, but not accompanied with metrorrhagia.

Physical examination showed a fairly well nourished white female about 25 years of age, apparently in no acute pain. Temperature 98.4, pulse 90, respiration 20.

Heart and lungs were normal.

Palpation of abdomen showed tenderness in left lower quadrant. Liver, kidneys or spleen were not palpated.

Pelvic examination showed a second degree laceration of the perineum. Uterus larger than normal, anteflexed and hard. Cervix red, boggy and edematous. Indefinite mass in left fornix.

Laboratory findings:

Blood: R. B. C. 3,830,000, Hbg. 65%, W. B. C. 7,850, Polys 79. Small Lymphocytes 18, large Lymphocytes 1, Basophiles 1, Transitional 1.

Urine: 1.014 acid, amber, turbid, trace albumen, no sugar, numerous pus cells, no R. B. C. or casts seen.

Provisional diagnosis: (1) Laceration of perineum. (2) Fibroid tumor of uterus.

On May 21st, 1925, she was operated upon by Dr. Garnett Quillian. On opening the abdomen the uterus was found to be symmetrically enlarged, rather soft, vessels enlarged—in short, it appeared to be a pregnant uterus.

*From the gynecological service of Dr. Garnett W. Quillian at Grady Memorial Hospital, and the Steiner Cancer Ward.

*Read before the Medical Association of Georgia, Athens, Ga., May 13, 1927.

It was decided that the uterus should be removed, even if pregnant, because of the cervix. After removing it, it was opened and a necrotic tenacious mass, extending through the endometrium and into the uterine wall, was seen at the lower uterine segment.

Pathological report as made by Dr. E. L. Bishop, of the Steiner Clinic, was as follows:

Uterus with one ovary. The uterus is moderately enlarged and fairly firm. The wall shows no fibrous tumors. The endometrium is slightly hypertrophied and in the lower segment is a shaggy, spongy and somewhat necrotic mass raised above the surface and penetrating into the musculature of the uterine wall. Vascularity is quite marked.

Sections of the intrauterine mass shows a great amount of blood, in which are found several fetal villi, some of which are of fairly normal appearance and others only shadows, without syncytium or Langhan's cells. In certain areas, there are large sheets on Langhan's cells, together with large syncytial masses and giant cells. Mitoses are limited to Langhan's cells. Wandering syncytial cells are found deep in the muscle wall. Nuclei are moderately hyperchromatic. Moderate necrosis and infiltration of round and polynuclear cells are found.

Sections through the endometrium away from the mass show numerous uterine glands, of large size, dilated and rather closely packed. Their lining cells are thrown into low folds. These glands resemble a very late premenstrual type.

Diagnosis: Chorioma; chorio-adenoma.

Post-operative course was uneventful. Wound healed by primary intention. On June 11th she was referred to the Steiner Clinic for X-radiation. On June 11th, 18th, 25th and 30th she received a cycle of treatment of pelvic contents. On September 23rd and 30th and October 6th and 12th, she received four more treatments.

In October, 1925, she had lost weight (then 114—usually 135), had a persistent hacking cough, and there were two small discolored areas in the vault of the vagina. These were not thought to be metastases, and X-ray examination of her chest was reported by Dr. R. H. Fike:

“November 3rd, 1925: Chest—No anatomical anomaly. Apices deep and clear. Periphery of lungs clear. There is slight exaggeration of hilus shadow at lower right—apparently not metastases.

“Impression: No evidence of metastases seen.”

She began to improve in general health and strength. Her weight increased. She had cycles of four X-ray treatments in February, 1926, and again in February, 1927.

She returned for examination May 2nd, 1927. Physical examination showed a well nourished, well developed, young woman, with pulse 68, temperature 98, respiration 16. Blood pressure 122-58, weight 123½ pounds. (Her maximum weight recorded was 125 lbs. on Dec. 20, 1926). Tonsils are enlarged. Two petechial spots in vault of vagina, which apparently mean nothing.

May 4th, 1927: R. B. C. 4,000,000, Hbg. 80%. W. B. C. 5,000, Polys 58%, Lymphocytes 41%, Transitional 1%.

May 6th, 1927: X-Ray: Chest—apices clear. Periphery of lungs clear. Some increase in peribronchial shadow. Precocious ossification of the costal cartilage margin. Heart shadow apparently normal as to size, shape and position, rather globular median vertical type. No evidence of metastases. Fike.

To all appearances and as far as can be ascertained, the patient has no evidence of any recurrence or continuation of the original condition.

Chorio-epitheliomata are, fortunately, very rare. Vineberg in his paper takes the 455 cases collected by Pollosson and Violet, and adds 78 more (9 of which were his own) to make a total of 533 cases in the literature up to 1918. The infrequency of the occurrence is one excuse for this communication.

Still more rarely is the true condition recognized. Especially in such a case as is here reported. The only pregnancy going to term having antedated the onset of this present illness eleven years, and the only other pregnancy in which a two months foetus was miscarried, occurred six years previously! Who would have thought these chorionic “rests”

or cells would have remained dormant in the uterus for so long a period?

These tumors vary greatly in their relative malignancy. Some are of a very low malignancy, while others proceed rapidly to a fatal termination. Most men hold that it is impossible to differentiate these types histologically, but Ewing, who has probably given more study to this point, than anyone else, divides them into three groups:

First: Chorio-adenomas—which usually follow an hydatid mole, and occur in multipara past 40 years of age. Hemorrhage is usually the first symptom. Hysterectomy is the treatment recommended.

Second: Chorio-Carcinoma—Characterized by profuse hemorrhages, early metastases, and usually very malignant.

Third: Syncytiomatous.

According to Ewing's classification our case would apparently fall in the first group—or Chorio-adenomas. At first, it was somewhat doubtful, and appeared to be between an adenoma and carcinoma. The history both pre-operative and post-operative would indicate an adenomatous growth, but structurally there are some points which suggest a carcinoma.

Metastases occur through the blood stream—hence they are most commonly found in the lungs, where hemoptysis may be the initial symptom, and in the central nervous system. They may be carried in the arterial blood, or grow back along the veins.

A complete hysterectomy is the operation universally recommended, but a Wertheim is not necessary, since the lymphatics, rarely, if ever, take part in the spread from the primary lesion. These tumors do, however, penetrate the musculature of the uterus, and not infrequently bring about a spontaneous rupture of the uterus, or produce a septic peritonitis, as in Meleney's case.

The presence of metastases, strange as this may seem, is *not* a contra-indication to operation. Cases are recorded in which metastases had appeared in the lungs before the hysterectomy had been performed, and in which the secondary involvement had improved or cleared up entirely after the primary lesion had been removed. This is contrary to the findings

in most malignant tumors, in which the metastases seem to become more malignant upon removal of the primary growth.

As to the symptoms, the principal one is hemorrhage, often very profuse, and if it is not at once dealt with, it ceases for a time, but soon recurs. As the disease advances, and ulceration occurs, pronounced anaemia and cachexia develop, with febrile pulse and temperature. Anomalous symptoms may arise at any time associated with lesions in the brain, lungs or elsewhere, indicating that metastases have taken place.

If the diagnosis has been made early and the uterus has not been subjected to too much manipulation as in repeated curettages, a complete hysterectomy frequently gives satisfactory results.

Theoretically, such a growth should yield readily to radiation. Some few have recommended radium instead of surgery. We have not, however, been able to find any reference in the literature to the use of X-radiation following operation.

This case has had four cycles of four treatments each at the Steiner Clinic, and we feel that this has made the ultimate outcome more certain.

DISCUSSION ON PAPER OF DR. NICOLSON

Dr. E. L. Bishop, Atlanta: Dr. Nicolson has presented the essential features of chorio-epithelioma and I simply want to emphasize a few points concerning this very interesting condition.

This tumor is an interesting one because, being of fetal origin, it belongs to another generation. These tumors are considered as fairly rare in occurrence, but I believe they are more common than is usually supposed. And again, they are important and interesting because their malignancy varies with their histologic structure.

Chorioma follows hydatid mole, abortion or labor at term. The interval of development is longer following mole and shortest after labor at term. This interval may vary from a few weeks to many years. The first and possibly only symptom is usually hemorrhage from the uterus and it is extremely important that a diagnostic curettage should be done and the material removed carefully examined for evidence of malignant disease.

The microscopic examination gives the diagnosis and the prognosis depends upon the picture found. Chorioadenoma is less malignant and the prognosis more favorable than a fully malignant chorio-epithelioma in which there is a wild growth of neoplastic cells derived from syncytium and from Langhan's layer. Fetal villi are absent in this type.

I will show you a few slides of the three divisions of chorionoma, chorio-adenoma, chorio-carcinoma and syncytioma. *

References omitted by author.

THEIR PHOSPHATIC INDEX*

G. Y. MOORE, M.D.
Cuthbert

No one can direct his attention to a study of the medical profession no matter how casually without receiving a profound impression of the tremendous strides that have been made within the past two decades in the treatment of disease, both of mind and body. To men of vision in the profession these wonderful achievements in therapeutics stand not merely as advances to be used for the benefits they can give of themselves but more particularly, as keys to greater discoveries in the march of medical progress.

"We know that a medical diagnosis even by the most expert is little more than a guess." Such is the recent pronouncement of the Chief Justice of the Supreme Court of the United States, made before that tribunal. The medical man knows that this statement will tend to show that the Chief Justice has probably been more attentive to the study of law than medicine. Perhaps his finding of such a sweeping scope may hold true in some remote portions of the globe but as applying to the countries where medicine has shown a sensational advance since the dawn of the century it goes liberally wide of the mark.

Man is, in a sense, a machine. Considered in this light, it is axiomatic that his many parts must function properly if there is to be continued health of mind and body. Any interference with the proper functioning of any part will manifest its disturbing influence on the body as a whole. When any such malefic

influence starts to get in its sinister work, people come to us for relief from suffering, restoration and if possible, promise of longevity.

If the doctor is to effect these results, he must depend for success on the proper diagnosis of the trouble. In the proper diagnosis, all doctors know, lies the secret of relief in every case. If the cause can be tracked to its lair, some remedy, at least of a temporary nature, can be prescribed.

Diseases may be generally classified as either organic or functional. Diseases of the organic type are due to the breaking down or failing of some organ. Diseases of the functional type are due to the want of proper functioning of the nervous system or the brain. The larger number of diseases met with by the practitioner fall under the latter classification.

In the proper diagnosis of a case, the medical profession is coming more and more to recognize the importance of the phosphatic index, which gives an estimate of the nerve energy as controlled by nutrition of the system. All the trillion cells, muscle, bone and fluid, which make up the human body, are fed by the flow of blood, constantly propelled by the nervous system. It strikes me that the medical profession can find no better field for its future researches than an exhaustive study of the position of the blood and nerve cells in the building and upkeep of the body in the life of man.

Dr. J. Henry Down of Buffalo, N. Y., in the New York Medical Record of 1912, explains thoroughly the value of the Phosphatic Index in ascertaining the amount of nutrition in the nerve cells and how it is being used.

In the human body a large supply of food is being stored up to meet future as well as present requirements. An eminent scientist has said that seventy-five per cent of the suffering of the human family is due to the crying of the nerves for food. If this is true, why not ascertain whether or not the illness is caused by excessive withdrawal or depletion of essentials in any organ and especially in the nervous system? Such a course will serve a great purpose in relieving suffering and successfully treating diseases as we know them today.

*Read before the Medical Association of Georgia, Athens, Ga., May 13, 1927.

By the use of the "Phosphatometer," one may determine the state of the nervous system at any time. In fact, as Dr. Smith of the University of Pennsylvania says:

"Taking the Phosphatic Index should be a routine in all cases, medical or surgical, as it gives more information than any other test."

The procedure for ascertaining the Phosphatic Index as described by its originator, Dr. J. Henry Dowd of Buffalo, N. Y., is as follows:

Use urine of the second passage in the morning. Fill the Phosphatometer with Urine to the point marked "U." Add alkaline solution to "S." This solution is: Magnesium Sulphate, Ammonium Chloride, Aqua Ammonia (ten per cent or common kitchen variety) of each, one ounce; water, eight ounces. This is an inexpensive mixture which can be made by anyone. It is well to let it stand for a few days before using so that saturation will be complete. Shake the Phosphatometer thoroughly and set aside for ten minutes. The precipitation falls to the bottom according to the density of the crystals.

If the nervous system is functioning normally, and nutrition is adequate, at the end of ten minutes, if the precipitate remains at "N. P." in a solid mass, no matter what may be the symptoms, what part of the body involved, or what is found, the nervous system as a cause may be eliminated. When the precipitation does not sink, is fairly light and fluffy, or goes below "N. P." a want of nutrition is indicated. If such a condition is found, the nervous system will prove to be the seat of the trouble in nine cases out of ten. To prove this, if nerve cell nutrition be supplied artificially, the response will be surprising to both patient and doctor. If the precipitate should remain above "N. P." in a fairly solid condition, it indicates a hyper-sensibility, or irritation of the neurones. Metabolism is increased above normal, and if this condition is allowed to continue, sooner or later it will result in a depletion of reserve, accompanied by a line of symptoms very distressing to the individual, termed Neurasthenia.

From what has been said, it will appear both reasonable and practicable that the Phosphatic Index should be used as extensively as

Dr. Smith suggests. Every doctor should have the instrument and know how to use it. A "plus" index calls for sedatives, and a "minus" reading calls for nerve cell nutrition. The doctor who hopes successfully to treat diseases should know that he must treat the patient behind the disease—deal with the causes, not the effects. As Kanter has expressed it, "We must reverse the binoculars, add distance to perspective, and include the whole patient." The foregoing basis of treatment will find the "Phosphatic Index" taking by use of the "Phosphatometer," a helpful approach in dealing with any case.

As instance of the results which I have actually obtained by the use of the Phosphatometer, I will outline several cases for study..

First Case

Mrs. C. of an adjoining state was referred to me. She had the following symptoms: varying in degree her fingers on both hands would become very cold even on hot summer days. At times her fingers were numb. She further showed a degree of anaesthesia was present. Often unable to sleep, due to the tingling sensation. This condition had developed quite suddenly five years before. At times her fingers had become blue and somewhat swollen. She had been treated by several good men who used various methods of treatment—electricity, X-ray, Radium, ointments and medicines administered internally, but no helpful results had shown in her ease.

On examination my opinion was Raynaud's Disease, Symmetrical, Neurotic Gangrene. All other methods seemingly of no avail, I took her Phosphatic Index and found it to be eighty per cent minus with badly formed crystals. This finding revealed a great want of nutrition of the nerve cells. I prescribed F. E. Valerian Oz-Iss Comp. Phos. Tonic, Oz-JSS glycerine q.s. Oz-Vj. A teaspoonful in milk half hour after meals. The patient returned to see me twenty days later showing marked improvement and feeling fine. The case was one of marked chronicity and I must assign the success in treating it to the helpful advice of the Phosphatic Index.

Case Two

(Herpes Zoster) Rev. S., aged 65. Suffered severe pains in the head, so intense that he

could not sleep without narcotics. He showed redness with swelling and the characteristic vesicles. His index showed he had a ninety per cent minus. I put him on Comp. Phos. Tonic with laxatives. In two weeks he was able to resume work with his churches.

Case Three

(Arthritis) In this case the man had an involvement of the knee joint, from which he had been laid up three months. Phosphatic index showed sixty per cent minus. Prescribed Valerian and Comp. Phosphorus with glycerine. In one week he was out on crutches and in two weeks he was well, attending to his work as a mechanic.

Case Four

(Malaria-High Blood Pressure)—This man was 64 years old with blood pressure 220-145. He was dizzy and could not sleep without taking Aspirin or something of the kind. His Phosphatic Index showed plus eighty per cent. I gave him Elix. Val. Ammon. with Sodii Brom. Before bedtime Cacodylate of Soda Hypo. Quinine. When he became more or less well, ordered Bromide of Gold or Arsenic. This was about a year ago. In sixty days his blood pressure was 165 S. and has not been above that since.

Case Five

(Rickets-Acidosis)—Baby, J. S. E., Ga. This case was found to be underweight. She showed Rosary and other signs of Rickets-Acidosis (cyclic vomiting) loose bowels, etc. I first gave her three grs. lactophosphate of calcium. After a few days I put her on Dr. Jacobi's R/ Pure Cod Liver Oil with Phosphorus. I advised feeding on modified cow's milk. In three months the child was normal in weight and absolutely well.

Case Six

(Gastric Uleer) J. K., basket maker. I saw him early last fall. He had indigestion for several months, pain over gastric region on pressure. Pain between meals. Small portion of food would relieve him. Blood pressure 137-87 P. 1. Forty minus. Had lost twenty pounds. Other organs normal. Diagnosis of gastric ulcer confirmed by X-ray taken by my friend, Dr. J. C. Patterson. Instructed him to rest. Put him on Einhorn's Gastric Uleer diet.

Medicines prescribed for first few days: Bismuth, Magnesium, Pepsin, Soda. He is still taking this R/. Later put him on Phosphorus, Nux Vomica and Cannabis Indica. He is making full time on job. Says he is feeling well and looks fine. Has gained fifteen pounds. Such a result makes it fair to assume gastric duodenal ulcers are of neurotic origin.

The alkaline phosphatic precipitate always appears in crystalline formation: A, normal (analogous to red cells having sufficient hemoglobin); B, showing a want of nutrition; C, Pregnancy (third week to third month); D, Oncoming neurotic degeneration; E, Great nerve cell excitability.. These are easily observed with the one-half inch objective.

In conclusion I might repeat the words of Prof. McKee:

"The Phosphatic Index has come to stay. It gives information as to cause of functional, or organic conditions at times that will surprise you."

DISCUSSION ON PAPER OF DR. MOORE

Dr. J. A. Redfearn, Albany: I have known for some time that my knowledge was quite limited but like Dr. Thrash said the other day, an emergency call would work well just now. I tried to learn something about this matter. Dr. Moore presents a very unusual subject and a most unusual paper. So far as his laboratory technic is concerned, I have had no experience and in looking this question up, I found that Dr. Dowd of Buffalo wrote an article in 1912. It does not seem to have impressed our writers very greatly because I cannot find any reference to it in the various medical and laboratory books. I am not saying this to condemn because I am trying to keep an open mind.

I want to discuss just a few of the points that Dr. Moore brought out and make some little reference to phosphorus and as to the origin of its use. Phosphoric acid in the urine is from two sources, exogenous and endogenous. By far the largest amount comes from food. Exogenous phosphoric acid comes from substances which are found in food. Von Noorden has shown that calcium carbonate prevents the phosphates from being eliminated by the urine upon giving fifteen to thirty grams of prepared chalk two or three times a day. Organic phosphorus occurs in three foods, namely, milk, eggs, and legumes.

With reference to rickets and the use of

phosphorus, Fisher of New York, found that 1/200 of a grain of phosphorus added to fresh cod liver oil acted beneficially but the latter alone, leaving out the 1/200 grain, gave the same results with the use of the fresh cod liver oil.

Dr. Moore in his paper calls attention to the statement that seventy-five per cent of illness is due to crying of the nerves for food. Then we should give I am sure the foods in these cases that contain milk, eggs and legumes. Any use of the drugs that he mentioned, of course, may be all right and no doubt is, but I would emphasize the use of foods.

Another important point that I want to emphasize is with reference to diagnosis. It seems to me that these cases are entitled to complete physical examination, x-ray, neurological, and serological examinations before we arrive at our final conclusions and study a number of cases before deciding definitely as to the advantages of Dr. Dowd's phosphatic index methods. It may be possible that the second condition Dr. Moore mentioned is of endocrine origin, such as a thyroid deficiency.

Dr. L. C. Allen, Hoschton: I am not going to discuss the paper. I thought it might be interesting to you to know that thirty-nine years ago last March Dr. Moore and I received our diplomas together at the Medical College in Augusta. I think there were fifty-six of us and there are just three or four left. Dr. Moore is a little grayer than I am but we are both boys and if Lucy, my two-year-old baby, had not been indisposed I would have brought her out for you to see a perfect specimen.

I want to congratulate Dr. Moore upon this very excellent paper which indicates considerable study and careful preparation.

Dr. G. Y. Moore, Cuthbert (closing the discussion): I want to thank Dr. Redfearn for his discussion. I did not expect Dr. Allen to tell how long since we graduated.

Dr. Redfearn spoke of Dr. Fisher's using cod liver oil without phosphorus. I got this from Dr. Jacobi in 1896. I have tried treating rickets with cod liver oil but I find I get better results by using a little phosphorus and sunlight.

As far as physical examination is concerned, I try to make it as far as I am able to do so.

I do not for one minute wish to convey the impression that the Phosphatic Index is infallible, nor would I suggest that its use will tell our farmer physicians how to dispose of their cotton at 25 cents a pound.

But I do wish to convey to you a few facts, the main one of which is that fully 75% of illness is of a functional nature. We have but

very little trouble in ascertaining the true cause in organic conditions, and generally we know what to do as to cause. But with functional cases it is an entirely different question; we know that for years different men have advanced opinions such as floating kidneys, flat feet, intestinal kinks, appendix and lastly local foci. We also know that most of these have been dismal failures, if we must believe the statements of individuals that have passed through the mill. In a recent article by Prof. Pepper U. P. (*Archives of Therapeutics*) he has pronounced focal foci as merely a fad, and those of us that have had experience can well testify to the truth of the same.

Statistics tell us that there are about 35 or 40 thousand men and women practicing the healing art in the United States, and classed as Charlatans because they are not recognized, nor are they prepared for their work as we have been by years of study in Medical Colleges. And further, we read that at least one-third of the population of the United States is now in the hands of these people being treated for their illness. It may be only an individual opinion, but I am quite sure that such a condition is largely due to ourselves because we have not relieved them of their sufferings.

The day has passed when we can look at their tongue, feel their pulse, take their temperature, give a pill and leave, they demand an examination and should get it.

The treatment of disease depends on the ascertaining of the cause and its removal where possible. The Phosphatic Index is not new, it has been used for years, and I can say that it has given me surprising results in cases that had been ailing for a long time.

DIAGNOSIS OF BRAIN TUMORS*

J. CALVIN WEAVER, M.D.

Atlanta

Since the incident of brain tumor has become probably one-fourth in frequency as compared to tumors of other parts of the body, and as the only hope of lowering a rather high mortality lies in an early diagnosis and consequently an earlier operation, it seems proper that a review be made of the outstanding symptoms of the more frequent locations of brain tumors.

Though brain surgery has made perhaps more rapid strides than any branch of surgery

*Read before the Medical Association of Georgia, Athens, Ga., May 13, 1927.

during the last decade, to use the words of John Abernathy written more than a century ago, "it is not, indeed, probable that any part of medical science can in a short time receive all the improvement of which it is capable: for, in proportion as we advance in knowledge, we are led to remark many circumstances in the progress of a disorder which had before passed without notice, but which if known and duly attended to, would clearly point out to us the nature and remedy of the complaint.

To quote further, "I hope that the hints to be offered in this paper may have the effect of inducing the physicians to pay a closer attention to cases of this kind, and that thus, by their united observations, we may at length become possessed of that knowledge, which the labors of an individual could never supply."

Regarding the pathology, I wish only to state that the most frequent varieties of brain tumor are glioma, sarcoma and endothelioma: that glioma are found in sizes varying from a hazel-nut to a fist, that they extend by infiltration of the brain tissue and rarely can be shelled out, and that it seems the irony of fate that endotheliomata, which offer a fair probability of enucleation, are rather rare and frequently inaccessible.

Every effort will be made to present only the practical points of diagnosis and to eliminate all highly technical terms.

For a nearer approach to diagnosis the effects of brain tumor must be considered from two different points of view: first, the general effects which can be caused by a tumor growing in any location; second, the localizing symptoms which frequently allow an accurate placing of the lesion. In many instances, especially if the growth is far advanced, the early localizing symptoms are overshadowed by the general, or pressure manifestations, so that a carefully taken history must be depended upon for a probable localization.

The general symptoms which admit of a diagnosis are headache, choked disc or swelling of the head of the optic nerve—which must be viewed with an ophthalmoscope—and vomiting. Given these three symptoms, a brain tumor must be ruled out before any other diagnosis is settled on. However, kidney dis-

ease, or profound toxemia from a focal infection, can cause this triad of symptoms. Some less frequent symptoms associated with the above are, vertigo, mental changes, diplopia and generalized convulsions.

The course of a brain tumor must be considered a chronic one, covering a period of 2 to 4 years, occasionally a period of 10 years. Occasionally after a long latent period, acute symptoms arise and prove rapidly fatal.

Headaches generally precede vomiting by several months, and vomiting is most frequently of the projectile type.

Convulsions accompanied by loss of consciousness are very frequent, and no case of epileptiform attacks should be allowed to go undiagnosed, especially those cases developing after the patient has reached the majority.

The localizing symptoms must be brought out by studying the functions of the different areas of the brain in a methodical manner.

As man has been aptly termed a "brain animal," and as Vogt distinguishes 100 different functioning areas in the whole cortex, 50 of which are in the frontal lobe, and as in man the frontal lobe shows the greatest disproportion of development as compared to other parts of the brain, we will consider *frontal lobe lesions first*. What can be affected by lesions in this lobe to give localizing signs?

1. First the higher psychological area.
2. The posterior portion contiguous with the motor area.
3. The cortical center for the conjugate deviation of the head and eyes toward the opposite side, also on the left the cortical center for spoken words.
4. The optic nerves.
5. The olfactory nerves.

Lesions confined to the upper or cortical portion of the frontal lobe, excite mental symptoms such as a state of good feeling, a tendency to jest, absence of anxiety as to the patient's condition, followed by dullness, failure of memory, and later, indifference to sphincter control.

A lesion progressing to the left in a right handed person, and vice versa, produces an inability to say what is intended, or an aphasia. Extending backward it may involve the

motor area, causing convulsions with conjugate deviation of the head and eyes to the opposite side.

Tumors in the base of the frontal lobe may cause loss of the sense of smell on the side of the lesion by pressure on the olfactory bulb: also by pressure on the optic nerve may cause blindness on the side of the lesion with a normal disc, with partial impairment of sight in the opposite eye, accompanied by choked disc: besides these symptoms, there is frequently a fine tremor of the outstretched fingers, the exact cause of which has never been definitely settled. There may also be cerebellar ataxia, caused either from irritation to the fronto-cerebellar tracts, or from general pressure.

Temporal Lobe

Since in the lower animal, especially the carnivorous family, the temporal lobes are relatively of larger size, we may reasonably assume that they contain centers for instincts of self-preservation, especially the elementary impulses of satisfying hunger and thirst. As local disease may destroy or increase the feeling of hunger, central disease may give rise to ravenous appetite. Ferrier has located this center at the anterior tip of the temporal lobe, near the olfactory center. This is exemplified by patients who have had a sub-temporal decompression on account of increased intracranial pressure developing an exaggerated desire for food. Besides hunger, some of these patients develop excessive thirst. Another form of self-preservation manifests itself in anger, which is exaggerated in irritation of the temporal lobe. Irascible insanity is frequently brought on by extension of a middle ear disease to the temporal lobe.

General convulsions are generally associated with lesions of this lobe. At the uncinate gyrus containing the centers of smell and taste and Heschl's convolution, the center for memory of spoken language and sounds, are located in the temporal lobe, general convulsions preceded by hallucinations of smell, or uncinate fits, accompanied by inability to name familiar objects, may be placed in the temporal lobe. Pressure on the optic radiations passing through the deeper portion of this lobe, frequently cause half blindness on the side opposite the lesion.

In testing for aphasia, care must be taken to learn if the patient is right handed or left handed, as the center is on the opposite side.

Parietal Lobe

In contrast to the intellectual functions of the frontal lobe and the functions of self-preservation of the temporal lobe, there is much evidence pointing to the probable fusion of the sensory centers in the parietal lobe.

It has been very clearly shown that pathological conditions in the parietal lobes, particularly the angular and supra marginal convolutions, bear a relationship to melancholic states of mind, and as far back as 1882 Voisin, in a paper on "The Suicidal Tendency" advanced the theory that lesions of the parietal lobe gave a tendency and impulse to suicide.

In my own experience, one patient suffering with gliomatous cyst of the right parietal lobe, after being relieved of a resulting hemiplegia by operation, developed a suicidal mania and finally succeeded in ending his own life.

In dealing with lesions of the parietal lobe, two areas must be considered either separately or jointly; first, the precentral, or motor area, and the post central, or sensory area.

For each motor area, there is a corresponding parallel sensory area. Involvement of the motor area causes two classes of phenomena, irritative and paralytic. Early manifestations are only irritative, and produce twitching of a certain muscle, or group of muscles which is followed by a subsequent paralysis.

The irritative phenomena manifest themselves in the form of Jacksonian epilepsy. The particular group of muscles are weak between attacks. If the lesion is cortical, the attacks precede the weakness, while if subcortical, the paralysis precedes the Jacksonian fits. If the lesion extends backward, there is a sensory disturbance accompanying the fits.

In disturbances of sensibility there may be loss of sense of position, joint sense, and inability to recognize the character of an object placed in the hand. If lesion is deep in the temporo-parietal region, there is occasionally 6th nerve paralysis, with complete half blindness, accompanied with visual hallucinations in the blind field.

Occipital Lobe

Though the cortical centers of sight are here located, this lobe continues to be an obscure area, and gives few localizing neurological symptoms. There are the general symptoms of bilateral choked disc, half blindness and occasionally unilateral hallucinations of vision, with visual Jacksonian attacks.

Cerebellar Lobe

Physiologists ascribe no mental function to this lobe, though it is significant that emasculation affects this lobe only. The outstanding function of the cerebellum is equilibrium and co-ordination.

As only the practical side is to be dealt with, no effort will be made to place the growth in different parts of the cerebellum, and only the general symptoms will be given.

Headache is generally in the occipital region, or the neck; some cases produce a rigidity of the neck. Bilateral swelling of the optic nerve appears early and is very marked, and is generally accompanied by paroxysms of vertigo and impairment of co-ordination. The vertigo is made worse by sudden change of position. The patient develops a reeling, drunken gait, frequently staggering toward the side on which the tumor is located. The patient stands less securely on the leg of the same side as the tumor. There is a horizontal dancing of the eyes from side to side which the patient can not control. In attempting the finger to nose test with eyes closed, the patient often overshoots the mark on the side of the lesion.

Extra-cerebellar tumors, particularly of the cerebellopontine angle, can almost be diagnosed by correspondence. They generally arise from the 8th, or auditory nerves. There is ringing, or buzzing, in the ear of the affected side, followed by a progressive unilateral nerve deafness. Vertigo is also a constant symptom on account of vestibular disturbance.

By further extension, the 7th nerve is sometimes involved, giving a facial paresis; also involvement of the 5th and 6th cranial nerves, causing pain in the face on the same side as the deafness, accompanied by internal strabismus.

Third Ventricle

Tumors of the third ventricle may be diagnosed by exclusion. There are the general signs of increased pressure, choked disc, headache, and perhaps vomiting, with bitemporal blindness in some. One patient with a small pedunculate tumor, showed only recurring attacks of headache and vomiting, no choked disc, and died a sudden respiratory death.

Tumors of the Pons

The outstanding symptoms are paralysis of the 5th, 6th, and 7th cranial nerves on the same side as the tumor, with a paralysis of the arm and leg on opposite side, and a corresponding hemi-anesthesia.

Pituitary Tumors

As volumes have been written on this one variety, it is impossible to cover such a large field. Suffice to say there is a bitemporal blindness and different combinations of visual disturbances; absence of choked disc, as the visual disturbances result from direct pressure which later causes atrophy of the optic nerve; there is loss of smell in some cases, diabetes insipidus and bitemporal headache. The patient grows rapidly fat, with subnormal temperature, and in the female there is amenorrhea.

Tumors of the Corpus Callosum

As the corpus callosum is composed of the fibres connecting the two hemispheres, some of the symptoms can be easily accounted for. There is marked impairment of the intelligence resembling paralytic dementia, inability to perform certain movements without actual paralysis. In some, all of the limbs may be involved and the patient gets all mixed up in his thoughts and actions.

A typical corpus callosum picture once seen, will always be remembered.

In conclusion, remember that the classical symptoms of a brain tumor are constant headache, followed by vomiting and swelling of the optic nerve heads, or "choked disc."

In every suspicious case a skiagram of the head should be made; a flat plate for the antero-posterior position, and a stereo of the lateral position. In this way can be detected calcified areas, a distorted sella, a pineal shift,

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Articles are accepted for publication on condition that they are contributed solely to this Journal.

Manuscripts should be typewritten, double-spaced, and the original (not the carbon copy) submitted. Used manuscript is not returned unless requested.

Communications and items of general interest to the profession are invited from all parts of the State. We especially invite county society secretaries to send us information of happenings in the county that would be of interest to the members throughout the State.

Reprints should be ordered within 30 days after the appearance of an article, since all type will be destroyed at the end of that time.

Editorial Department**THE SAVANNAH MEETING**

The next annual session of the Association will be held in Savannah, May 9, 10, 11, 1928. The Committee on Scientific Work published its preliminary report in the December, 1927, issue of The Journal. Since many who have submitted titles for the scientific program have not complied with the rules of the committee we are again repeating them. Any member of the Association in good standing is eligible to submit a title for the consideration of the committee. All titles must be submitted before March 15 and must be accompanied by a synopsis of not more than fifty words. Preference will be given to those who did not appear on the program last year. An effort will be made to have all sections of the state represented. Titles may be sent to the Secretary-Treasurer or to any member of the Committee on Scientific Work.

Provision will be made by the Committee for scientific exhibits. All those desiring

space for scientific exhibits of any nature whatsoever should communicate with the committee. Ample space will be allotted for all exhibits and demonstrations of a scientific and educational nature.

Those desiring to compete for the Crawford W. Long Gold Medal should signify their intentions on their application for a place on the program. Dr. W. R. Daney, chairman of this committee is anxious to have all competing papers read at the same meeting if possible. This Medal is awarded annually to that member of the Association who presents a report of the best original research work.

THE L. C. FISCHER PRIZES

At the annual meeting of the Fulton County Medical Society in January the L. C. Fischer prizes of \$100.00 each were awarded as follows: for the best original research work, Dr. M. Hines Roberts; for the best essay, Drs. R. H. Wood and G. A. Williams. The title of Dr. Roberts' paper was: "The Relation of the Pigment Content in the Serum and the Spinal Fluid of New-Born Infants," and that of Drs. Wood and Williams: "Primitive Human Hearts."

These two prizes were first mentioned at the annual meeting of 1925 when Dr. E. C. Davis announced that Dr. Fischer, desiring to stimulate study and research amongst the younger members of the Fulton County Medical Society, would give for the next two years, two prizes of \$100.00 each, one for the best original research and the other for the best prepared paper, presented before the society during the year by any members under thirty-five years of age. The winner of the first two prizes was Dr. M. Hines Roberts with his paper on "Physiological Pigmentation of the New-Born."

The winner of the two prizes for 1926 was Dr. Dan C. Elkin with his paper: "Intra-pleural Pressure in Post-Operative Atelectasis."

Encouraged by the enthusiasm aroused during the first two years Dr. Fischer renewed his offer in 1927, the prizes being won as mentioned above and presented this year. Dr. Fischer has again offered the prizes for 1928. It is expected that there will be a larger num-

ber of contestants this year than at any previous time.

With his original gift Dr. Fischer named Drs. E. C. Davis, E. Bates Block and Allen H. Bunce the judges to select the winning essays each year.

POST-GRADUATE STUDY IN VIENNA

One of our members who has recently completed a course of post-graduate study in Vienna states that he was exceedingly well pleased with the clinical facilities offered American physicians. However, he advises those desiring to take similar work to communicate with the American Medical Association in Vienna. Courses can be arranged not only more advantageously by doing this but also more reasonably from a financial standpoint. It is unnecessary for any American physician to sign up with or join any special group or party. In fact there are usually so many to be accommodated on the various post-graduate tours and special trips arranged for those in the different specialties that one gets more sight-seeing than post-graduate instruction. There are nearly always other American physicians in Vienna who are glad to co-operate by taking special courses with those just arriving. In this way, either in couples or small groups, much more and better individual instruction and experience may be obtained. This is valuable information for those contemplating study abroad and we are greatly indebted to this member for calling our attention to these facts.

OUR BULLETINS

THE PIEDMONT HOSPITAL BULLETIN

The Piedmont Hospital Bulletin, published under the direction of the Clinical Society of the Piedmont Hospital and edited by Dr. Montague L. Boyd, was the first of the present hospital bulletins to be published in Georgia. The most recent issue, Volume 4, Number 3, contains an article on the Piedmont Hospital Training School for Nurses and two scientific reports: "Squamous Cell Carcinoma of the Lower Lip. Report of a Case," by Dr. J. W. Landham, and "Benign Prostatic Hypertrophy," by Dr. M. L. Boyd. This Bulletin, from its inception, has featured reports of interest-

ing and illustrative cases. Under the able editorship of Dr. Boyd the articles have been well selected and unusually well prepared. He has insisted on correctness of grammar, rhetoric, spelling, punctuation, etc., as well as a logical sequence in reports of cases. Dr. Boyd's own case reports and articles may well be used as models by those preparing papers for publication.

THE BULLETIN OF THE DAVIS-FISCHER SANATORIUM

This Bulletin was founded by Dr. L. C. Fischer who desired to give to the younger members of the Staff of the Davis-Fischer Sanatorium an opportunity to publish articles and case reports of general interest. This is another effort of Dr. Fischer to encourage the younger men to study their cases more carefully and to acquire the necessary experience in preparing and publishing the results of their studies. Just as there was a marked reduction in the number of medical schools there has also been a marked reduction in the number of medical journals and it has become more and more difficult to obtain space for the publication of many worth while articles. The hospital bulletin is the only solution..

THE BULLETIN OF THE HARBIN HOSPITAL

For some time the Harbin Hospital in Rome has published a bulletin of general interest to the profession. These have contained many short articles and practical suggestions. Under the leadership of men who are students as well as practitioners of medicine and who perform research in their every day practice Rome has established itself as one of the chief medical centers of the state. The harmony and co-operative spirit manifested by the profession in Floyd County might well be emulated by the members of some of our other county societies.

ARCHIVES OF GRADY HOSPITAL.

The Archives of Grady Hospital made its initial appearance in November, 1927. Dr. Newdigate M. Owensby is the Editor. The Associate Editors are: Drs. J. H. Hines, T. C. Davison, H. R. Donaldson, L. W. Childs, M. T. Benson and C. C. Aven. In the foreword the Editor states: "Grady Hospital is the only general hospital in the city of Atlanta whose

clientele is limited to charity patients. Its visiting staff is composed of over eighty physicians representing all branches of scientific medicine. The amount of clinical material passing through its wards, emergency and out-patient departments each day is unusually large and varied. The visiting staff has long felt a desire to share their observations with their colleagues in the medical profession in the South." The initial number contains the following: "The Surgical Gallbladder," by Dr. T. C. Davison; "Sterility in Women," by Dr. G. W. Quillian; "Hematuria," by Drs. W. A. Upchurch and S. T. Brown; "Toxemias of Pregnancy," by Dr. Frank Eskridge; and "Cerebellar Tumors," by Dr. N. M. Owensby. This forms a distinct addition to our medical literature. With the vast amount of clinical material at its disposal this bulletin should prove to be one of the best in the entire country.

BULLETIN OF THE JOHN D. ARCHBOLD MEMORIAL HOSPITAL

This Bulletin, the February, 1928, issue being Volume 3, Number 3, is edited by the Staff of the John D. Archbold Memorial Hospital. This issue contains two well prepared scientific articles: "Syphilitic Aortitis. A Case Report," by Dr. Roy A. Hill and "Gastrospasm from Extrinsic Lesions," by Dr. L. D. Parry. The case report by Dr. Hill shows careful study and thorough preparation. The diagnosis was confirmed by the autopsy findings. The postmortem examination of our fatal cases is a method of clinical research open to all and its more frequent employment will do more than any other one thing to advance our own medical knowledge.

THE BULLETIN OF THE OGLETHORPE SANATORIUM

Volume 1, Number 1 of this Bulletin made its appearance with the January, 1928, issue. It is edited by Dr. Julian K. Quattlebaum and will be published quarterly. The first issue contains the following scientific articles: "Osteitis Fibrosa Cystica," by Dr. T. P. Waring; "Occipito-Posterior Positions Complicating Labor," by Dr. E. Carson Demmond; "The Premature Baby in the Home," by Dr. A. J. Waring; and "The Adenomatous Goiter," by Dr. Julian K. Quattlebaum. The articles are carefully selected and well pre-

pared. The excellent illustrations add materially to the scientific value of the presentations. We congratulate the editor and authors on their first issue.

THE ABNER WELLBORN CALHOUN LECTURESHIP

At the suggestion of Dr. J. E. Paullin, the Committee on Scientific Work, unanimously selected Dr. de Schweinitz to be one of the distinguished invited guests to deliver an address at the next annual session of the Association. He will do so on Wednesday, May 9, the first day of the session. The lectureship fund is steadily growing but only a very small proportion of our members have contributed. Every member of the Association should consider it an honor and a privilege to help build up this fund since it will go on doing good many years after the original founders have passed on. The entire fund together with a list of the donors will be placed in a trust company to be held in trust for the Association and only the interest from the fund will be used each year. This lectureship will provide us annually with one of the world's most distinguished physicians to visit us and give us the benefits of his knowledge and experience without any deduction from the current assets of the Association. Incidentally, we may mention that the visit of Dr. de Schweinitz will be without any expense to the Association. If you haven't already done so, send in your contribution to this fund today.

The following letter from Dr. Paullin is self-explanatory:

"To the Editor:

Will you not be kind enough to make mention in the next issue of the Journal of the Medical Association that Dr. G. E. de Schweinitz of Philadelphia, Pennsylvania, has consented to make the first address on the Abner Wellborn Calhoun Lectureship on Wednesday, May 9th, before the State Medical Association. The subject will be "Headaches." I believe that we are very fortunate in being able to obtain the consent of such a distinguished gentleman to open the lectureship since he is, as you know, one of the foremost men in ophthalmology in the United States and is past president of the American Medical Association. He is a delightful talker, a most learned man and a most estimable entertainer.

J. E. PAULLIN, M.D."

THE JOURNAL OF THE WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION

We have recently received the first issue of the Journal of the Woman's Auxiliary to the American Medical Association. It is published in Dallas, Texas, under the able editorship of Mrs. John O. McReynolds, President of the Auxiliary. The first issue contains greetings and best wishes from the officers of the American Medical Association, many members of the House of Delegates, editors of the state journals, and many others. In fact, this journal was launched with the combined good wishes of the entire profession. This issue is sponsored and financed by the Texas Auxiliary, and contains much valuable information in reference to auxiliary matters. Its style and general make-up is excellent and it fills a very necessary need in cementing the various state organizations into a compact national auxiliary.

THE RIGHT OF PHYSICIANS TO DEDUCT TRAVELING EXPENSES

Senator Arthur R. Robinson of Indiana, at the request of many physicians in his state, has introduced in the Senate an amendment to the Tax Reduction Bill to insure to physicians the right to deduct in the computation of their federal income taxes traveling expenses incurred in attending meetings of medical organizations. The proposed amendment insures to members of trade and business organizations generally this right, which seems to depend now wholly or bureaucratic rulings. If physicians desire the enactment of Senator Robinson's amendment they must in each state induce their Senators to stand solidly behind him in his effort to procure justice.

The fact that Commissioner of Internal Revenue has denied only physicians the right to deduct traveling expense incurred in attending the meetings of professional, business and trade organizations answers the question as to why no class other than physicians complains of the nondeductibility of these traveling expenses. The Commissioner, as he himself ad-

mits, has promulgated no rule denying the right of any other class to deduct such expenses. No other class has been aroused to a defense of its rights.

Senator Robinson has opened a way to obtain for the physicians of the country the justice for which they have so long been clamoring. It remains now for them to support him in his movement. The likelihood of success is in proportion to the activity of the medical profession. Letters and telegrams to Senators urging them to support Senator Robinson should be sent immediately if the movement is to succeed.

—Editorial J. A. M. A., Feb. 11, 1928.

DIAGNOSIS OF BRAIN TUMOR

(Continued from page 83)

convolution atrophy and rarefied areas in the skull.

In obscure cases a trephine opening should be made and air injected into the ventricles, followed by X-ray examination. This frequently points to a location.

Lumbar puncture should not be done in the presence of a choked disc, as sudden death may ensue.

References:

Purves Stewart—The Diagnosis of Nervous Diseases.

H. Oppenheim Bruce Translation—Text Book of Nervous Diseases.

Bernard Hollander—Mental Symptoms of Brain Disease.

DISCUSSION ON PAPER OF DR. WEAVER

Dr. C. E. Dorman, Atlanta: I am glad that Dr. Weaver has again brought the subject of brain tumors to the attention of the Association. The average physician does not realize that brain tumor is a very common condition and as such is liable at almost any time to come up in his own practice. The autopsy statistics from some of the world's largest hospitals (The Allgemeine Krankenhaus, for example) prove that brain tumor is the cause of death in two-tenths of all cases coming to necropsy. I feel quite sure that this estimate is entirely too conservative. Nevertheless if we take for granted that two people out of every one thousand in the United States die of brain tumor in the course of a generation (fifty years), and that there are 115,000,000

people in the United States, there should be something like 230,000 brain tumors in the United States during the course of the next fifty years. If we divide this number by the average life expectancy, say fifty years, there should be in the United States to be diagnosed and treated about 4,600 brain tumors every year. I doubt very seriously if there has been 10,000 brain tumors diagnosed and treated in the United States during the past twenty-five years, whereas there should have been at least 4,600 diagnosed and treated every year. Although all this is purely hypothetical I feel quite sure that it is impressive enough to justify the subject of brain tumor being brought rather constantly to the attention of the medical profession.

Any chain of symptoms indicating a progressive disturbance of the central nervous system should immediately bring to mind the possibility of brain tumor. Dr. Weaver has emphasized the importance of recognizing the symptoms of increased intracranial pressure, namely, headache, vomiting and disturbance of vision. Although any one of these three cardinal symptoms should cause one to suspect brain tumor as being the cause, yet if the medical profession continues to wait for the appearance of these symptoms, many cases of brain tumor will continue to be diagnosed too late to be materially benefitted by surgical intervention. There are many so-called localizing symptoms such as, for example, Jacksonian convulsions, a slight weakness of a hand or foot, a feeling of numbness in an extremity that is progressive in severity and in extent, hallucinations of smell and vision, so-called half vision, ringing in the ears, etc., which if properly interpreted will frequently justify the diagnosis of brain tumor many months before the occurrence of the distressing symptoms of increased intracranial pressure. The earlier the diagnosis the better the chances for permanent cure.

It is unfortunately a rather prevalent belief even among physicians that all brain tumor cases die regardless of whether they are operated upon or not. This is in no sense true. In glancing over the records of some one hundred verified tumors operated upon while Dr. Weaver was working with me I must confess that I was surprised to learn that there were thirty of these cases who were still living a year or more after operation. As the diagnostic acumen of the general practitioner increases and the skill of the neurological surgeon improves the percentage of cure and improvement in cases of brain tumor will I am quite sure show marked improvement.

The burden of suspecting these cases lies with the general practitioner. He is the man who first sees them. Whenever a patient com-

plaints of chronic headache, vomiting, disturbance of vision, localized paralysis, Jacksonian epilepsy, etc., the general practitioner should immediately put the burden on some good neurologist to prove whether he is right or wrong. In this way only can these distressing cases receive an all essential early diagnosis, and be given the benefit of early surgical intervention.

Dr. Calvin Weaver, Atlanta (closing): I would like to thank Doctor Dowman for his discussion. When my paper was written I felt that his discussion would perhaps be more interesting than the paper itself. My former association with Doctor Dowman has been a source of inspiration as well as information.

Just here, I wish to state that it was through the courtesy of my friend, Dr. A. W. Adson, of the Mayo Clinic at Rochester, Minnesota, that I was fortunate enough to be able to illustrate my paper with the lantern slides that have been used today.

Regarding the diagnosis of brain tumors, I wish to reiterate the importance of an X-ray of the skull unsuspected lesion of the brain, and to say that an anteroposterior and a lateral stereo should be made, and in obscure cases a ventricular puncture.

In the event that a ventricular puncture must be resorted to, one should be ready to proceed with the complete operation, as there is always a certain amount of danger in ventriculography. Ventricular punctures with air injections frequently give valuable information, and are undoubtedly an asset in brain surgery.

I would particularly warn you against doing a lumbar puncture in the presence of choked discs, as the relief of pressure is always likely to cause a herniation of the brain stem, which might result in respiratory death.

COMMITTEES FOR CONVENTION OF MEDICAL ASSOCIATION OF GEORGIA SAVANNAH, GEORGIA, MAY 8, 9, 10, 11, 1928

Main Committee

CENTRAL COMMITTEE ON ARRANGEMENTS

Chairman Dr. W. R. Dancy.
Dr. G. H. Lang.
Dr. A. A. Morrison.
Dr. W. H. Myers
Dr. J. K. Quattlebaum.
Dr. Ralston Lattimore.
Dr. Robert Drane.

SUB-COMMITTEES

SUB-COMMITTEE ON FINANCE

Chairman Dr. J. K. Quattlebaum.
Dr. H. M. Kandel.
Dr. E. J. Whelan.

(Continued on page 90)

Georgia State Association of Graduate Nurses

OFFICERS

| | | | |
|-------------------------|----------------------------------|-------------------------|---------------------------------|
| President..... | Miss Annie Bess Feebeck, R.N. | | |
| | Grady Memorial Hospital, Atlanta | | |
| 1st Vice-President..... | Miss E. Alma Brown, R.N. | 2nd Vice-President..... | Miss Jessie Veazey, R.N. |
| | University Hospital, Augusta | | St. Andrews Apt., Atlanta |
| Secretary..... | Mrs. Alma E. Albrecht, R.N. | Treasurer..... | Miss Jane Van De Vrede, R.N. |
| | Georgia Infirmary, Savannah | | 105 Forrest Ave., N.E., Atlanta |

NEW DISTRICT ORGANIZATION IN SOUTHWESTERN GEORGIA

A new district organization, to be known as the Fifth District of the Georgia State Nurses' Association, with headquarters in Columbus, was organized in that city on Thursday, January 26th at the Ralston Hotel.

This organization will make it comparatively easy for nurses of southwestern Georgia to affiliate, and is a step which the officers of the G. S. N. A. have contemplated for some time.

The new district was formally launched under auspicious circumstances, with about forty graduate nurses present at the meeting. Columbus and Muscogee County nurses were gracious in their hospitality, and Miss Annie Bess Feebeck, president of the G. S. N. A., was present, lending inspiration to the occasion. Miss Jane Van De Vrede, executive secretary, was also present to aid in organizing the new district.

Tentative by-laws were adopted and the meetings set for the first Thursday of each month. The following officers were elected to serve this year: Mrs. Isadore Hermann, president; Miss Eva Chalkley, first vice-president; Miss Ella Jones, second vice-president; Mrs. W. A. Hendricks, secretary; Miss Frances Moon, treasurer. Mrs. W. B. Brittain and Miss Effie Dacin were elected members of the executive board.

The counties to be included in the Fifth District are Muscogee, Troup, Meriwether, Harris, Talbot, Chattahoochee, Marion, Schley, Stewart, Webster, Sumter, Lee, Terrell, Randolph, Quitman, Clay, Calhoun, Dougherty, Mitchell, Baker, Early, Miller, Seminole, Decatur and Grady.

Third District

A meeting of the Third District organiza-

tion of the G. S. N. A. was held in Brantley Hall, Georgia State Sanitarium, Milledgeville, on February 4th, with 22 members and 10 student nurses present.

Miss Dora Kershner, superintendent of the Macon Hospital Training School for Nurses, and Educational Chairman for the District, had charge of the program, which was very interesting. Miss Minnie Bass, instructor of the Macon Hospital Training School, contributed a paper on "The Value of Case Study," and Miss Virginia Champion and Miss Mary Huthnabee, senior students of that institution, also gave papers, which dealt respectively with an obstetrical case complicated by fracture of the hip, and mental hygiene. Miss Rosa Cole, another senior of the Macon Training School, gave a humorous reading which was enjoyed.

Eleven new members were added to the roster of the District.

Mrs. Mae M. Jones, president of the Third District, presided at the meeting.

Compulsory Registration and Re-Registration

On the 20th of February the waiver provided in the compulsory registration law passed by the General Assembly last summer will have expired. After this date it will be illegal for any graduate or undergraduate nurse to practice as such without certificate from the State Board of Examiners, or until application has been made for examination and temporary permit secured.

The new nursing law in part reads: "Any person violating any of the provisions of this Act shall be guilty of misdemeanor and upon conviction thereof shall be punished in accordance with Section 1065 of the Penal Code of the State of Georgia."

Under the waiver of the new law hundreds of nurses have received their "R. N.'s," and many Under Graduates have also been licensed

to practice. Graduate and Under Graduate nurses not licensed should at once make application to the Secretary of the Board, Miss Jane Van De Vrede, 105 Forrest Ave., N.E., Atlanta, Ga. Examinations will be held at an early date in Atlanta, Macon, Savannah, Augusta and Columbus.

Re-Registration

Re-registration began January first of this year, in Georgia, and its benefits are already being felt. Nurses whose addresses have not been known for years by the State Board are communicating with the office of the Secretary. District organizations and Alumnae Associations are co-operating with the Board in sending in their rosters, with corrected names and addresses of members. Up to time of going to press, something like one thousand nurses had renewed their certificates of registration, but there are many more due to renew within the next thirty days, as upwards of three thousand nurses have been registered by the State Board since 1908. The greater number of these are still living in Georgia and will doubtless desire to keep their registration in effect in order to be able to practice their profession, if not now, perhaps at some future time. A renewal can be secured by sending one dollar and the name under which originally registered, together with address and new name, if changed, to the Secretary of the Board.

Before June 1, 1928, a list of re-registered nurses must be compiled and published by the Board.

G. S. N. A.

The Executive Secretary of the Georgia State Nurses' Association announces that reprints of the account of the convention of this organization, held in Macon, Nov. 8-10, 1927, as published in this Journal, can be secured from the Headquarters office upon request.

Miss Mary Beard of the Rockefeller Foundation, with headquarters in New York City, visited Atlanta recently in the interest of nursing education. The Rockefeller Foundation is giving large sums to the advancement of nursing education not only in this but in many other countries, and Miss Beard's visit to the South is significant. She went to New Orleans from Atlanta.

Miss Helen Zeigler, R. N., formerly connected with the Piedmont Hospital, and now

Assistant Director of Nurses, General Hospital, University of Cincinnati, Ohio, was another visitor in Atlanta recently. Miss Zeigler, who is well known to Georgia nurses, expressed herself as being very much interested in and proud of the accomplishments of Georgia nurses.

COMMITTEES FOR CONVENTION OF MEDICAL ASSOCIATION OF GEORGIA SAVANNAH, GEORGIA, MAY 8, 9, 10, 11, 1928

(Continued from page 88)

Dr. T. J. Charlton.
Dr. D. B. Edwards.
Dr. D. J. Buchanan.
Dr. H. T. Exley.
Dr. E. N. Gleaton.
Dr. W. R. Dancy, Ex-Officio.

SUB-COMMITTEE ON ENTERTAINMENT

Chairman Dr. W. H. Myers.
Dr. C. F. Holton.
Dr. J. K. Train.
Dr. R. V. Martin.
Dr. H. W. Hesse.
Dr. L. W. Williams.
Dr. J. C. O'Neill.
Dr. W. R. Dancy, Ex-Officio.

SUB-COMMITTEE ON CLINICS

Chairman Dr. Ralston Lattimore.
Dr. J. W. Daniel.
Dr. L. Lee.
Dr. G. H. Faggart.
Dr. G. T. Olmstead.
Dr. W. B. Crawford.
Dr. M. J. Egan.
Dr. Jabez Jones.
Dr. A. J. Waring.
Dr. W. R. Dancy, Ex-Officio.

SUB-COMMITTEE ON ACCOMMODATIONS

Chairman Dr. Robert Drane.
Dr. Lee Howard.
Dr. H. V. Righton.
Dr. Chas. Usher.
Dr. H. H. McGee.
Dr. J. L. Elliott.
Dr. W. R. Dancy, Ex-Officio.

OFFICERS GEORGIA MEDICAL SOCIETY SAVANNAH, GEORGIA

Dr. G. H. Lang, President.
Dr. H. T. Exley, Vice-President.
Dr. A. A. Morrison, Secretary-Treasurer.

DELEGATES TO MEDICAL ASSOCIATION OF GEORGIA

Dr. M. J. Egan.
Dr. C. F. Holton.
BOARD OF CENSORS
Dr. J. K. Train.
Dr. W. R. Dancy.
Dr. Charles Usher.

District and County Societies

DISTRICT OFFICERS

FIRST DISTRICT

President.....Lanier, L. F., Rocky Ford
1st Vice-Pres.....Myers, Wm. H., Savannah
2nd Vice-Pres.....Elarbee, G. W., Daisy
Sec'y-Treas.....Long, W. V., Savannah

SECOND DISTRICT

President.....Redfearn, J. A., Albany
Sec'y-Treas.....Watt, Chas. H., Thomasville

THIRD DISTRICT

President....Stukes, J. T., Americus
Vice-Pres.....Daves, V. C. Vienna
Sec'y-Treas.....Greer, Chas. A., Oglethorpe

FOURTH DISTRICT

President.....Clark, W. H. LaGrange
Sec'y-Treas.....Callaway, Enoch, LaGrange

FIFTH DISTRICT

President....Ansley, W. S., Decatur
Vice-Pres.....Barber, W. E., Atlanta
Sec'y-Treas.....Camp, R. T., Fairburn

SIXTH DISTRICT

President.....Miles, W. C., Griffin
Vice-Pres.....Miller, G. T., Macon
Sec'y-Treas.....Thompson, O. R., Macon

SEVENTH DISTRICT

President.....Wofford, W. E., Cartersville
Vice-Pres.....Harbin, R. M., Rome
Sec'y-Treas.....McCord, M. M., Rome

EIGHTH DISTRICT

President.....Johnson, J. E., Elberton
Vice-Pres.....Reynolds, H. I., Athens
Sec'y-Treas.....Carter, D. M., Madison

NINTH DISTRICT

President.....Davis, B. B., Gainesville
Vice-Pres.....Neal, L. G., Cleveland
Sec'y-Treas.....Bennett, J. C., Jefferson

TENTH DISTRICT

President.....Cranston, W. J., Augusta
Vice-Pres.....Revell, S. T. R., Louisville
Sec'y-Treas.....Ward, C. D., Augusta

ELEVENTH DISTRICT

President.....McMichael, J. R., Quitman
Vice-Pres.....Fleming, Albert, Folkston
Sec'y-Treas.....Reavis, W. F., Waycross

TWELFTH DISTRICT

President.....New, J. E., Dexter
Vice-Pres.....Edmondson, J. W., Dublin
Sec'y-Treas.....Cheek, O. H., Dublin

1927 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 20, 1927.
2. Turner County, Dr. J. H. Baxter, Ashburn, November 15, 1927.
3. Terrell County, Dr. Logan Thomas, Dawson, December 1, 1927.
4. Pike County, Dr. M. M. Head, Zebulon, December 3, 1927.
5. Ben Hill County, Dr. L. S. Osborne, Fitzgerald, December 8, 1927.
6. Evans County, Dr. S. T. Ellis, Claxton, December 29, 1927.
7. Jasper County, Dr. E. M. Lancaster, Shady Dale, January 6, 1928.
8. Talbot County, Dr. C. C. Carson, Talbotton, January 28, 1928.
9. Wayne County, Dr. M. N. Stow, Jesup, February 9, 1928.

NEW MEMBERS FOR 1928

Cain, Sylvester, Plains
Carter, C. B., Columbus
Faulkner, J. A., Canton
Garrison, D. H., Tate
Harris, E. R., Winder

Hendrix, M. G., Ball Ground
Houston, W. H., Americus
Houston, W. R., Augusta
Kennedy, B. L., Dalton
Liles, W. W., Gainesville
McClure, G. C., Ball Ground
Neil, F. K., Albany
Pickett, F. B., Ty Ty
Rhodes, W. O., Holly Springs
Seawright, E. C., Fayetteville
Turk, J. P., Nelson

COUNTIES REPORTING FOR 1928

EVANS COUNTY MEDICAL SOCIETY

Evans County Medical Society announces the following officers for 1928:

President—J. W. Daniel, Claxton.
Vice-President—G. W. Elarbee, Daisy.
Secretary-Treasurer—S. T. Ellis, Claxton.
Delegate—B. E. Miller, Claxton.

WHITFIELD COUNTY MEDICAL SOCIETY

Whitfield County Medical Society announces the following officers for 1928:

President—R. S. Bradley, Dalton.
Vice-President—J. C. Rollins, Dalton.
Secretary-Treasurer—E. O. Shellhorse, Dalton.
Delegate—H. L. Erwin, Dalton.

EMANUEL COUNTY MEDICAL SOCIETY

Emanuel County Medical Society announces the following officers for 1928:

President—E. T. Coleman, Graymont.

Vice-President—S. S. Youmans, Oak Park.

Secretary-Treasurer—R. C. Franklin, Swainsboro.

Delegate—E. T. Coleman, Graymont.

CHEROKEE COUNTY MEDICAL SOCIETY

Cherokee County Medical Society announces the following officers for 1928:

President—Grady N. Coker, Canton.

Vice-President—David H. Garrison, Tate.

Secretary-Treasurer—Geo. C. Brooke, Canton.

Delegate—J. T. Pettit, Canton.

TAYLOR COUNTY MEDICAL SOCIETY

Taylor County Medical Society announces the following officers for 1928:

President—W. W. Edwards, Butler.

Vice-President—S. H. Bryan, Reynolds.

Secretary-Treasurer—J. C. Hind, Reynolds.

Censor—R. C. Montgomery, Butler.

JASPER COUNTY MEDICAL SOCIETY

Jasper County Medical Society announces the following officers for 1928:

President—J. F. Anderson, Hillsboro.

Vice-President—F. S. Belcher, Monticello.

Secretary-Treasurer—E. M. Lancaster, Shady Dale.

BARROW COUNTY MEDICAL SOCIETY

Barrow County Medical Society announces the following officers for 1928:

President—W. T. Randolph, Winder.

Vice-President—C. B. Ahmand, Winder.

Secretary-Treasurer—W. L. Mathews, Winder.

FULTON COUNTY MEDICAL SOCIETY

Fulton County Medical Society announces the following officers for 1928:

President—E. C. Davis, Atlanta.

Vice-President—C. E. Waits, Atlanta.

Secretary-Treasurer—Howard Hailey, Atlanta.

Board of Censors—W. E. Barber, H. C. Miller and L. H. Kelsey.

BARTOW COUNTY MEDICAL SOCIETY

Bartow County Medical Society announces the following officers for 1928:

President—T. Lowry, Cartersville.

Vice-President—A. L. Horton, Taylorsville.

Secretary-Treasurer—W. E. Wofford, Cartersville.

Delegate—R. E. Wilson, Cartersville.

Alternate—W. E. Wofford, Cartersville.

Censors—W. C. Griffin, R. E. Wilson and S. M. Howell.

COOK COUNTY MEDICAL SOCIETY

Cook County Medical Society announces the following officers for 1928:

President—H. W. Clements, Adel.

Vice-President—S. G. Ethridge, Sparks.

Secretary-Treasurer—W. M. Shepard, Adel.

WASHINGTON COUNTY MEDICAL SOCIETY

Washington County Medical Society announces the following officers for 1928:

President—S. B. Malone, Sandersville.

Vice-President—F. B. Rawlings, Sandersville.

Secretary-Treasurer—B. L. Helton, Sandersville.

Delegate—E. S. Peacock, Harrison.

Alternate—N. Overby, Sandersville.

COMMUNICATIONS

To the Editor:

The New England Anti-Vivisection Society has sent out a form letter announcing its plan to "introduce into the House of Representatives, at Washington, during the coming session, a bill for the exemption of dogs from vivisection." The letter requests the addressee to circulate an accompanying petition in support of the bill and to ask his representative in Congress to vote for it. The Society alleges that the "International Conference for the Investigation of Vivisection, which now includes eighty-six anti-vivisection and humane societies," is sponsor for the bill.

Congress cannot directly restrict scientific research in any state. What Congress does, however, will be an important factor in determining by state legislatures. The anti-vivisectionists are alive to this fact. They therefore seek legislation by Congress, for the District of Columbia and other places under exclusive federal jurisdiction, in order to establish a legislative pattern that the states may be induced to follow. Moreover, it has been frankly confessed on behalf of anti-vivisection interests that if a bill to prevent scientific research involving the use of dogs is enacted they will probably promote legislation to prevent the use of other animals for such research.

To prevent the enactment of legislation that will hinder scientific research in the District of Columbia and other places under federal control and that will be urged as a pattern for the enactment of similar legislation in your own state, it is important that you file with your senators and representatives immediately protests against the enactment by Congress of the bill now proposed by the New England Anti-Vivisection Society.

Yours truly,

WM. C. WOODWARD,

Executive Secretary,

Bureau of Legal Medicine
and Legislation, A. M. A.

To the Editor:

All of us think sometimes there are too many medical societies. But one that has functioned regularly for nearly half a century must have something worth while about it, don't you think? And when that particular one gets better every year you know it must be worth while.

You may or may not know this one I am writing you about is one of the few societies *really* profitable both to men in general work and those engaged in special lines. It has no sections and every address is pointed right at the weak point

in the whole scheme of the practice of medicine. And that is, as you have often thought, the border-line where general medicine and the specialties meet. The general practitioner must know something of the specialist's work and the latter ought to know a good deal of general medicine.

The Tri-States Medical Association of Mississippi, Arkansas and Tennessee, will meet at Hotel Peabody, in Memphis, on February 29-March 1-2, 1928. For absolute *quality*, pure and undefiled, the program to be presented has never had a superior at any medical gathering in the South. That is a calm statement of fact—not boasting. There have been several which had more *bulk*, but few have ever approached it in *worth*. Read the list of speakers further over in this issue and begin right now arranging your affairs so you can hear every one of them. It means an intensive, varied, post-graduate course you can't *afford* to miss! If you fail to receive a program write me for one.

Yours sincerely,

DR. A. F. COOPER,
Secretary-Treasurer,
Bank of Commerce Bldg.,
Memphis, Tenn.

P. S.—This is a *medical* meeting and not a golf-stick, trap-gun gathering. If you want to hear intelligent men talk interestingly and instructively on important medical subjects, come. Most of us can still learn a little!

To the Editor:

You requested that I send you the number of male midwives who were instructed by the State Board of Health in a county in north Georgia.

I find that our records show that a certificate was issued to three men in this county and according to the records of the instructor, they made very good marks in their course of instruction and showed quite an interest in the work. As you realize, there are many communities in the northern section of Georgia that at some time during the year, it is almost impossible to travel in any type of vehicle and some of the time it is necessary for the midwife or doctor to walk some ten or twenty miles to attend a patient in labor and I believe this is the reason why these men are acting in the capacity of midwives in these communities. One of these men is employed as a rural mail carrier, the occupation of the other two is that of farming.

I am enclosing you also a summary of the county health work of the twenty-seven counties having full time health departments in Georgia. It is very interesting to see the increase of the work of the quarter ending September 30, 1927, over the same period of time for the year 1926.

Very truly yours,

M. E. WINCHESTER, M.D.

Director, Division of County Health Work.

GEORGIA STATE BOARD OF HEALTH DIVISION OF COUNTY HEALTH WORK

Summary of County Health Work for the quarters ending September 30, 1926 and 1927.

| | Grand Total Quarter Ending Sept. 30, 1926 | Grand Total Quarter Ending Sept. 30, 1927 | Per Cent Increase of 1927 over 1926 |
|---|---|---|---|
| Lectures | 271 | 323 | 19.2 |
| Attendance | 15,561 | 17,278 | 11.0 |
| Literature distributed | 16,683 | 28,697 | 72.0 |
| Newspaper articles | 218 | 258 | |
| Cases of communicable diseases | 822 | 1,112 | |
| Total number visits.... | 1,567 | 2,370 | 52.2 |
| PRENATAL | | | |
| Number new cases..... | 130 | 160 | 25.6 |
| Home visits | 1,359 | 1,653 | 21.6 |
| Midwives instructed | 567 | 604 | 6.5 |
| MATERNAL | | | |
| Number new cases..... | 259 | 368 | 42.1 |
| Number visits | 1,904 | 1,985 | 4.3 |
| Infants under supervision | | | |
| Visits to newborn..... | 1,794 | 1,886 | 5.1 |
| Consultations with mothers | 1,180 | 946 | |
| School children examined... | 2,808 | 4,726 | 68.3 |
| No. defective children..... | 1,508 | 2,618 | |
| Total No. defects found.... | 1,847 | 3,314 | |
| Follow-up visits | 2,448 | 3,758 | 53.5 |
| Complete antityphoid inoculations | 15,256 | 38,912 | 155.1 |
| Complete toxin-antitoxin treatments | 2,408 | 3,814 | 58.4 |
| Protective antitoxin | 158 | 175 | |
| Curative antitoxin | 59 | 91 | |
| Anti-smallpox vaccinations . | 5,774 | 5,953 | |
| Anti-rabic treatments | 55 | 67 | |
| VENEREAL DISEASES | | | |
| New cases treated..... | 341 | 403 | |
| Total number treatments... | 5,446 | 7,501 | |
| Total No. hookworm examinations | 681 | 724 | 21.0 |
| No. food handlers and dairy employees examined | 422 | 704 | |
| Inspections of private premises | 35,004 | 53,947 | |
| Inspections of schools and other public buildings.... | 353 | 409 | |
| Inspection of dairies..... | 773 | 1,024 | |
| Inspections of swimming pools | 94 | 69 | |
| Inspections of markets and eating places | 4,348 | 3,698 | |
| Complaints investigated ... | 1,003 | 1,358 | |
| Specimens examined | 4,173 | 6,500 | 34.2 |

| | | | |
|---|-------|-------|-------|
| Specimens sent to State | | | |
| Laboratory | 582 | 812 | 39.5 |
| SANITARY PRIVIES INSTALLED | | | |
| Rural | 167 | 213 | 27.5 |
| Urban | 346 | 573 | 65.0 |
| Privies restored to sanitary | | | |
| type | 439 | 962 | 119.1 |
| Infant and pre-school cases | | | |
| improved | 346 | 250 | |
| Defective school cases | | | |
| improved | 1,032 | 1,295 | 25.5 |
| Nuisances abated | 892 | 2,314 | |
| Totals for Chatham County not included in report for quarter ending September 30, 1927; only two months included in Mitchell County reports for this quarter. | | | |

BOOKS RECEIVED

Blood-Pressure. Its Clinical Application by George William Norris, M.D., Professor of Clinical Medicine in the University of Pennsylvania, Chief of Medical Service "A," Pennsylvania Hospital; Henry Cuthbert Bazett, M.D., Professor of Physiology in the University of Pennsylvania; and Thomas H. McMillan, A.B., M.D., Assistant Physician to the Pennsylvania Hospital; Cardiologist to the Philadelphia General Hospital. Fourth edition, thoroughly revised. Illustrated with 47 engravings and 1 colored plate. Containing 387 pages. Publishers: Lea & Febiger, South Washington Square, Philadelphia.

NEWS ITEMS

Dr. T. C. Davison, Atlanta, was elected president of the entire medical staff of the white unit of Grady Hospital at a recent meeting. He is also chief of the surgical staff.

Dr. L. G. Hardman, Governor, was the principal speaker at the installation of the officers of the Fulton County Medical Society held at the Piedmont Driving Club on January 5.

Dr. C. Thompson, Millen, owner of the Millen hospital, is completing a ten-room nurses home and will begin work at an early date on a new wing to the hospital.

Dr. S. J. Lewis, Augusta, Councilor for the Tenth District, has given much publicity in the Augusta newspapers of the plan to secure data to compile a History of Medicine in Georgia.

Drs. T. J. Collier, R. B. Ridley, L. C. Rouglin, and W. A. Selman were given honor certificates by the Fulton County Medical Society for having been members for more than twenty-five years at the annual dinner on January 5.

Dr. J. R. Dykes, Marshallville, was elected Commissioner of Health for Grady county.

Dr. Dan M. Carter, Madison, has been appointed by Governor L. G. Hardman as a member of the State Board of Health.

Dr. Robert L. Rhodes, Augusta, was elected vice-president of the Southern Surgical Association at its final session held at Augusta on December 15.

Dr. Guy L. Hunter of Johns Hopkins University School of Medicine, Baltimore, held a special clinic at the Athens General Hospital on December 16. An operation was performed in the presence of a group of physicians of Athens and surrounding counties. Dr. Hunter is professor of Gynecology.

Dr. D. P. Luke, Camilla, has been elected to the staff of the John D. Archbold Memorial Hospital, Thomasville.

Dr. John J. Anderson, Savannah, has opened offices at 143 Abercorn Street, after an absence of more than a year at Tulane University of Louisiana School of Medicine, New Orleans, taking post-graduate courses in medicine and surgery.

The Macon Hospital Commission announces the appointment of the staff for this year as follows: Superintendent, Dr. J. R. Clemmons. Surgery: Drs. A. R. Rozar, Harry Moses, and O. H. Weaver. Medicine: Drs. J. F. Adams, F. L. Webb, and T. E. Rogers. Obstetrics: Drs. O. S. Spivey, I. H. Adams, and O. R. Thompson. Gynecology: Drs. J. C. Anderson, C. H. Richardson, Jr., and C. C. Harrold. Pediatrics: Drs. Benj. Bashinski, W. L. Bazemore, Ernest Corn, D. T. Henderson, C. L. Pennington, J. M. Sigman, W. A. Newman.

Dr. Julian K. Quattlebaum, Savannah, will edit a Bulletin for the Oglethorpe Sanatorium which will be an attractively printed booklet for the profession and issued quarterly with four articles written by members of the staff.

Dr. Grady N. Coker, Canton, announces that his practice will be limited to consultation, general surgery and hospital work.

The physicians of Cuthbert and Randolph county sponsored an all-day clinic which was held at the Patterson Hospital in Cuthbert on February 2, which was conducted by professors from the University of Georgia Medical Department, Augusta.

Dr. J. W. Palmer, Ailey, has been appointed Assistant to the Chief Surgeon of the Seaboard Air Line Railway Company.

Dr. Harry B. Neagle, formerly of Augusta, is located at Weston, West Virginia, in the United States Public Health Service as a Field Agent in the Co-operative County Health Work.

Dr. T. D. Walker, Jr., formerly of Macon, announces the removal of his offices to Winston-Salem, North Carolina, and will continue the practice of medicine there.

Dr. Julian K. Quattlebaum, Savannah, read a paper on Pre-Operative Preparations and Post-Operative Care before the regular meeting of the Georgia Medical Society in January.

Dr. H. L. Earl, formerly of Jewell, has removed to Sparta and opened offices for the practice of his profession.

The Ware County Medical Society entertained the members of the Board of Health of Ware, Charlton and Brantley Counties at the Phoenix Hotel in Waycross on January 13. Dr. M. E. Winchester, Director of County Health Work, was a guest of honor.

Dr. and Mrs. Stewart D. Brown, Royston, entertained about sixty physicians and their wives at the Brown Hospital on January 4. Prominent physicians read several instructive papers.

Doctors Ernest Wahl, C. H. Watt, Mary J. Erickson, C. H. Ferguson, Agnew Andrews, Roy Hill, A. D. Little and H. M. Moore, all of Thomasville, accepted an invitation from the Second District Medical Society of Florida and attended its meeting held at Tallahassee on January 13.

Dr. and Mrs. P. Y. Duckett, Cornelia, entertained the members of the Habersham County Medical Society and their wives on January 12.

Davis-Fischer Sanatorium, Atlanta, announces the appointment of Miss Francis L. Williams as Superintendent of the institution.

Dr. Frank K. Boland, Atlanta, read a paper on Observations on Thoracic Surgery before the Scientific Meeting of the American College of Surgeons held at the Tampa Bay Hotel, Tampa, Florida, on January 26-27.

Davis-Fischer Sanatorium, Atlanta, secured the services of Miss Lillian Kennedy more than a year ago as a full time artist to prepare illustrations and anatomical sketches for the members of the staff. Miss Kennedy completed a course in anatomical drawing at Baltimore and has had extensive experience in the work since.

Dr. T. F. Abercrombie, Atlanta, Commissioner of Health and Secretary of the State Board, announces that the death rate in Georgia has decreased from 19 per thousand in 1911 to 9.9 per thousand in 1927 and if the same death rate had prevailed in Georgia in 1927 as did in 1911 there would have been 15,000 more deaths than actually occurred.



DR. LAWSON M. JOHNSON

Dr. Lawson M. Johnson, Yatesville, died at his home on January 11, 1928, after a protracted illness. He was born in Chattanooga, Tennessee, October 29, 1850. Dr. Johnson came to Georgia while only a youth and settled in Upson County. He graduated from the University of Georgia Medical Department, Augusta, in 1883. Dr. Johnson took an active interest in all civic and educational affairs of his community and was local surgeon for the Southern Railway at Yatesville for years. He was a member of the Upson County Medical Society, the Medical Association of Georgia, and the American Medical Association. Surviving him are his widow, five sons, Guy Johnson, Lakeland, Florida; C. A. Johnson, Oneco, Florida; Dr. Geo. L. Johnson of the U. S. Veterans' Hospital, Atlanta; Dr. James A. Johnson, Manchester; Walter B. Johnson, Yatesville; one daughter, Mrs. Fannie Jackson, Yatesville. Funeral services were conducted by Rev. W. W. Childs from the residence and interment in Methodist church cemetery.

Dr. John Jackson Foster, College Park, died at the home of Mr. George Smith in Cordele on January 2, 1928. He was born in Fayette County in 1862 and graduated from the Southern Medical College, Atlanta, in 1889. Dr. Foster practiced medicine in College Park from the date of his graduation until 1921 when he retired. He is survived by his widow, one daughter, Miss Doris Fos-

ter; two sons, Dr. K. E. Foster, and John K. Foster, all of College Park. Funeral services were conducted from the residence by Rev. L. E. Roberts and interment in the College Park cemetery.

Dr. Joseph H. Horsley, West Point, died at his home on December 20, 1927. He was born at Antioch, Georgia, on July 27, 1873, and graduated from Tulane University School of Medicine, New Orleans in 1894. Dr. Horsley practiced his profession for more than thirty years at West Point and was noted for his courtesy and kindness. He was a member of the Methodist church. Surviving him are his widow, two sons, Clifton Horsley of West Point, and Robert Horsley of Montgomery, Alabama; three daughters, Misses Hattie and Leila Horsley, and Mrs. M. E. Sherman, all of West Point. Funeral services were conducted from the residence by Rev. J. W. Veatch and interment in Marseilles cemetery.

Dr. Roderick D. McLeod, Lyons, died at his home on December 15, 1927. He was born in 1870 and graduated from the Emory University School of Medicine in 1893. Dr. McLeod practiced medicine in his home community until recent years and had been President of the Toombs County Medical Society, a member of the Medical Association of Georgia, and the American Medical Association. He is survived by his widow, one daughter, Mrs. D. L. R. Mims, Tampa, Florida; one son, D. McLeod, a student at Georgia Military College, Milledgeville. Funeral services were conducted from the Baptist church by Rev. J. D. Raburn and interment in the city cemetery.

Dr. Joseph F. Stewart, Griffin, died at his home January 10, 1928. He was born at Griffin in 1850 and graduated from Emory University School of Medicine in 1891. Dr. Stewart was well known and a prominent practicing physician until last August, being forced to give up his practice on account of his health. He is survived by his widow, and one brother, J. B. Stewart, Atlanta. Funeral services were conducted from the home by Rev. L. M. Lattimer and interment in Oak Hill cemetery.

Dr. Walter Byron Jameson, Augusta, died at a local hospital in Augusta, on January 10, 1928. He was born at Waverly Hall, near Columbus, in 1893, and graduated from the University of Georgia Medical Department, Augusta. Dr. Jameson had spent the fall and early winter at the University of Iowa taking a post-graduate course. He was a member of the Richmond County Medical Society, Medical Association of Georgia, and the American Medical Association, Masonic fraternity, and the Presbyterian church. Surviving him are his widow, one daughter, Virginia; and a sister, Mrs. W. W. Lyngar, Atlanta.

Dr. James W. Bradley, Adairsville, died at his home January 11, 1928. He was born in Adairsville in 1850 and graduated from the Southern Medical College, Atlanta, in 1880. Dr. Bradley practiced his profession in Bartow, Floyd and Gordon counties until recently, being forced to give up his practice on account of his health. He was a prominent physician of that section and was a leading figure in fraternal circles, was Past Master of Adairsville Masonic Lodge and a member of the Baptist church. Surviving him are his widow, one son, Dr. T. E. Bradley, Atlanta; one daughter, Mrs. Reese Combs, Tunnel Hill. Interment was in East View cemetery.

ATHENS MEDICAL INSTITUTE

On March 7th and 8th under the auspices of the Clarke County Medical Society and the Athens Child Health Demonstration a two-day Medical Institute will be held for members of the 8th District Medical Society. Speakers include Dr. J. C. Bloodgood, Johns Hopkins, Baltimore, Md.; Dr. W. A. Mulherin, President, Georgia Medical Society, Augusta, Ga.; Dr. D. Lesesne Smith, President South Carolina Medical Society, Spartanburg, S. C.; Dr. O. C. Wenger, A. A. Surgeon, U. S. P. H. S., Hot Springs, Ark.; Dr. E. W. Glidden, Superintendent Alto State Sanitarium.


On Wednesday March 7th, Dr. Bloodgood will speak at a public meeting on the subject of cancer. Clinics will be held in the mornings by the staff of St. Mary's and the Athens General Hospital.

Visitors from the Medical Association of Georgia will be welcome, and a program will be sent to all interested. Please write Dr. Paul L. Holliday, Southern Mutual Building, Athens, Georgia.

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APOPLECTIC AND APOPLECTIFORM SEIZURES*

ETIOLOGY AND MANAGEMENT

WILLIAM A. SMITH, M.D.
Atlanta

The etiology of an apoplectic seizure, especially in a young adult is a frequent problem of great therapeutic importance. I shall discuss briefly the common causes of such seizures, basing my remarks on that type in which a sudden hemiplegia, with more or less disturbance of consciousness.

HEMORRHAGE

Intracerebral. Cerebral hemorrhage usually occurs without warning; exceptionally, there is sudden vomiting, vertigo, difficulty in speech, or a sensation of numbness immediately preceding the attack. The attack occurs when the blood pressure is suddenly increased, as by emotional strain, physical exertion, vomiting, coughing, straining at stool or a convulsion. The basic cause lies in hypertension, disease of the vessels or both; occasionally it is due to disease of the blood, as leukemia or anemia. The patient falls in coma; due to the increased intracranial pressure there is also slowing of the pulse, the respirations are slow, deep and stertorous, and may be of Cheyne-Stokes type; there is an early fall in temperature of one or two degrees. The diagnosis from other causes of coma is made by signs of localized brain lesion. Thus there is often conjugate deviation of the head and eyes to the side of the hemorrhage; the pupils are dilated, that on the side of the hemorrhage being the larger; the face is smoothed out, and puffs out with each expiration on the paralyzed side; the extrem-

ities are flaccid, being more flaccid at first on the paralyzed side; this can be seen by lifting the arm or leg, and letting it fall; another valuable sign is to flex the forearm to a right angle, and raise the hand to a vertical position; on releasing the hand, it falls quickly on the paralyzed side, and slowly on the opposite side; the reflexes may all be lost, or they may be only diminished on the paralyzed side; the plantar reflex may show extension of the great toe on the paralyzed side very early; there is local hyperthermia on the paralyzed side. In addition, there is difficulty in swallowing, urinary and rectal incontinence or retention. After 24-48 hours, if the patient recovers, consciousness gradually returns, the temperature rises to one or two degrees above normal, the pulse gradually rises, ability to swallow and control of sphincters return. The pupillary and corneal reflexes return; the skin reflexes return except the abdominals on the paralyzed side; the tendon reflexes gradually return and become increased on the paralyzed side; extension of the great toe to plantar stimulation is now seen on the paralyzed side. Increased tone appears in the paralyzed extremities, especially in the extensors of the lower extremity and the flexors of the upper extremity, and may lead to the development of characteristic contractures. The paralysis may improve, but usually there is some weakness remaining, chiefly in the arm and hand. If the motor paths were not primarily involved, recovery from paralysis may be complete, some other focal symptom remaining as a permanent defect. Cerebral hemorrhage is almost never immediately fatal, even when rupture into a ventricle occurs¹. As grave prognosis signs are considered a prolonged fall or marked rise in temperature; a marked fall in pulse (below 50) or marked rise; acute decubitus or congestion of the lung on the paralyzed side (trophie?); coma over 24 hours. The first indication in treatment is to

*On program as alternate, Medical Association of Georgia, Annual Session, Athens, Ga., May 11, 12, 13, 1927.

lower the blood pressure; the patient should be placed in bed with the head high and left alone as much as possible; an ice cap may be applied to the head, and heat to the feet, but beyond attention to the bowels and bladder, the less the patient is disturbed, the better for him. Venesection where the pressure is very high may be life-saving. Spinal puncture is sometimes used to lower the intracranial pressure, but this is a dangerous practice. Since the hemorrhage ceases when the blood pressure and the cerebro-spinal fluid pressure are equal, sudden withdrawal of a large amount of spinal fluid may promote further hemorrhage. Removal of a few drops of spinal fluid for diagnosis may be without harm, the fluid usually being normal except for increased pressure. The prevention of cerebral hemorrhage lies in the treatment of the hypertension, and avoidance of severe physical and emotional strains.

Intraventricular. Ventricular hemorrhage is usually secondary to a large hemorrhage in the brain, which has ruptured into the ventricle. The attack resembles that of a cerebral hemorrhage. Certain features may suggest a rupture into a ventricle, such as profound coma, early rigidity of all extremities, stiff neck, convulsive movements and marked signs of increased intracranial pressure—marked slowing of the pulse and respiratory disturbances.

Removal of a few drops of spinal fluid will show a uniform admixture of blood, which does not coagulate; if the fluid is centrifuged, the supernatant fluid will be yellow. Death usually occurs within 24 hours.

*Subarachnoid*². Spontaneous subarachnoid hemorrhage is a clinical entity which is increasing in frequency, or being recognized more often. The hemorrhage takes place into the subarachnoid space; it may occur even in childhood. There may be a history of typical migraine, recurrent epistaxis or vertigo for years preceding the hemorrhage. It is a striking thing that the migraine may cease after a hemorrhage occurs. The onset occurs suddenly with severe headache, pain in the neck or vomiting; disturbance of consciousness may be slight, with mental confusion and various psychotic syndromes, or coma may occur. Signs of weakness in one side of the

body are common. Evidence of meningeal irritation occurs early, as marked muscular tenderness, rigidity of the neck and a Kernig sign. The pulse and respirations are slow, and usually there is a slight rise in temperature. Retinal hemorrhages, and choked disc are frequent, and occasionally hemorrhage into the vitreous occurs. Localized convulsions are frequent. The clinical findings are similar to those of a cerebral hemorrhage, except for the signs of meningeal irritation, which may be so marked that meningitis is suspected; however, meningitis does not have such an acute onset. The meningeal signs, marked retinal hemorrhages and choked disc should suggest the diagnosis. The diagnosis is confirmed by the spinal fluid findings, of a uniform admixture of blood, which does not coagulate, and the yellow color of the fluid after centrifugation. The prognosis is quite good, over 50% of the reported cases having recovered; however, repeated attacks are common. The treatment is similar to that in cerebral hemorrhage, except that cautious removal of spinal fluid is of value, removing the products of blood decomposition, which are toxic to the meninges. The causes of this condition are numerous; hypertension, syphilis, arteriosclerosis, diseases of the blood, acute infections, vascular neoplasms, and embolic aneurysms have been found in a few cases; the etiology in the majority of cases is unknown; it is believed by some that congenital points of weakness (congenital aneurysm) in the vessels are responsible for the hemorrhage.

The following case is illustrative of a subarachnoid hemorrhage, followed by a cerebral hemorrhage:

A male, aged 47, first seen on March 4, 1927, had suffered for three weeks with intermittent headache; on March 1st the headache became very severe, associated with vomiting and drowsiness; on March 2nd he developed marked weakness in the left arm and hand. There were no other symptoms except some blurring of vision, which had been present for two weeks. Examination showed that he was somewhat mentally confused and did not comprehend questions well; there was slight drooping of both upper lids, and weakness of the left external rectus muscle. There was a paralysis of the lower left facial mus-

cles, left arm and hand, rather flaccid in type. The left abdominal reflex was absent, and the tendon reflexes in the left arm were slightly increased; the plantar reflex was of the normal plantar flexion type on both sides. There was diminution of sensation to light touch and pin point in the left arm and hand, and a loss of joint sense in the fingers and toes on the left side; there was an astereognosis on the left side. Other neurological findings were normal. The pulse was 60, blood pressure 164/80. The temperature was normal. There was a trace of albumin in the urine. The spinal fluid was under 360 mm. (water) pressure, and was uniformly bloody; the blood did not coagulate, and the supernatant fluid after centrifuging was yellow. The Wassermann reaction was negative. The patient had evidently had a subarachnoid hemorrhage, with some pressure over the right Rolandic region of the brain. With cautious removal of spinal fluid on alternate days, the fluid gradually became normal. The patient gradually improved, and on March 16th, his paralysis had practically completely disappeared, he was mentally clear and had no complaints.

On March 27th, the patient was taken with sudden vomiting and fell to the floor. When seen a half-hour later, he was semi-conscious; there was complete paralysis of the left lower face, left arm and hand; the right pupil was widely dilated, the pulse was very strong, 60 per minute; the blood pressure was 160/120. The pupillary and corneal reflexes were lost, also the left abdominal reflex, but the other reflexes were normal. The patient gradually merged into deep coma. A spinal puncture showed clear, colorless fluid, under 170 mm. (water) pressure. On the following day, he developed convulsive twitchings on the right side (apparently due to the hemorrhage on the right side displacing the brain so as to cause pressure on the left hemisphere). The patient died on March 30, 1927. A post-mortem examination showed a tremendous cerebral hemorrhage, involving the entire right hemisphere. There was marked cerebral arterio-sclerosis.

Subdural. Subdural hemorrhage or pachymeningitis hemorrhagica interna usually occurs in senile dementia, paresis or chronic alcoholism. The diagnosis is rarely made before death. The onset is gradual in most cases,

but occasionally may be rather sudden and associated with a hemiplegia. Remission of symptoms is common, also great variability; the condition is often bilateral, and the symptoms may change from one side to another. Hemorrhages into the retina, and choked disc frequently occur, also signs of meningeal irritation, as rigidity of the neck. The skull may be sensitive over the site of hemorrhage and the patient may complain of terrific localized headache. There is usually slight fever and slowing of the pulse. The spinal fluid is usually clear, but occasionally is yellowish. The traumatic form has been thoroughly studied by Cushing and Putnam³, and operation in this type has been quite successful.

EMBOLISM

The onset and clinical course of a cerebral embolism is very similar to that of cerebral hemorrhage. There is no warning, and the attack often occurs during physical strain. As a rule, the affected individuals are young. Localized convulsive attacks are more common than with hemorrhage. If the embolus clogs a large vessel, there is sudden coma. If the embolus affects a very small vessel, coma may be lacking. The diagnosis is not justified unless there exists a source for an embolus, such as endocarditis, auricular fibrillation coronary occlusion; emboli occasionally occur during the puerperium; fat emboli sometimes follow careless handling of fractured bones. The diagnosis may be aided by signs of infarcts in other organs, as the kidney, or embolism of the central artery of the retina. Emboli usually lodge in the mid-cerebral artery or one of its small branches. The treatment is to keep the patient quiet and at rest. Iodides may be of some value. The treatment of the primary disease of which the embolus is merely a symptom should not be neglected.

A case believed to be cerebral embolism may be briefly reported:

On June 7, 1927, a woman of 45 years, apparently in good health, fell unconscious while shopping in a department store. When seen at the hospital, she was semi-conscious but was unable apparently to speak; there was conjugate deviation of the head and eyes to the right; the left side of the face was paralyzed, also the left arm and leg; the left arm was contracted in flexion, mid-way be-

tween supination and pronation, the fingers flexed, with the thumb inside—a typical pyramidal contracture. The pupils were equal, and did not react to light; the ocular fundi were normal. The pulse was 80, the temperature was 99. The tendon reflexes were increased on the left side, with extension of the toe to plantar stimulation on that side. The blood pressure was 130 80. The pulse was irregular, also the apex beat, the irregularity being characteristic of auricular fibrillation. The following day, the patient became worse, the coma deepened, the right pupil became widely dilated, the rigidity of the left arm disappeared and the arm became flaccid. She died without regaining consciousness. It is believed that the patient had a large embolus lodged in the right mid-cerebral artery, arising from the heart.

THROMBOSIS

Cerebral thrombosis or intravascular coagulation is more common in the brain than anywhere in the body. This is due to the physiological peculiarities of the cerebral circulation, in that it normally tends to be slower than elsewhere. The factors leading to thrombosis are disease of the vessels, such as syphilis or atherosclerosis, and slowing of the circulation. Occasionally disease of the blood, as leukemia will lead to thrombosis. Cerebral thrombosis is preceded for several days or longer by headache, dizziness, difficulty in speech or transient numbness in the extremities. These are important warning signs. A localized convulsion frequently occurs immediately before the onset. The onset is very different to that of hemorrhage; it usually occurs during a time of rest or inactivity, when the blood pressure is low; it frequently occurs while the patient is asleep. Coma is uncommon. The paralysis is of gradual onset over a period of ten minutes to several hours; it may occur in a step-like fashion, as first in one extremity, later in another. There is little or no change in pulse, temperature or respiration. The blood pressure is usually found low or only slightly above normal. There are only two possibilities for recovery from thrombosis—by means of collateral circulation, or by canalization or ab-

sorption of the thrombus. Unless the thrombus is lodged in a large vessel at the base of the brain, there is no possibility of collateral circulation, as the cortical and ganglionic vessels are end-arteries. The treatment is to aid canalization or absorption. It is thus necessary that the circulation be stimulated; if the blood pressure is very low, cardiac stimulants may be necessary; the patient should not be allowed to rest in bed for any prolonged time, but should be up and moving about. The treatment is radically different from that in hemorrhage. Iodides in large doses, within a few hours after the onset may be of great value; it is preferably given intravenously. The value of iodides probably rests in the reduction of the viscosity of the blood (similar to the value of salines in thrombo-angiitis obliterans), its tendency to cause vasodilation⁴, and its aid in absorption of granulation tissue. The most frequent causes of cerebral thrombosis are vascular syphilis, and atherosclerosis; occasionally acute infectious diseases, certain toxemias and severe burns are the basic factors.

It is believed that much can be done to prevent thromboses in patients having arteriosclerosis. Among the prodromata, there occur various transient symptoms, such as disturbance in speech, numbness, vertigo, and even transient hemiplegia. There have been various explanations for these transient symptoms in arteriosclerosis. Inman⁵ believed that an abrupt slowing of the cerebral circulation could explain many of them. Many believe a vascular spasm occurs, as the essential factor. Holmes reported several cases following dehydration by hot baths and marked sweating, producing increased blood viscosity. While these factors are undoubtedly essential in certain cases, they are just the factors which lead to thrombosis, and I believe should be considered as an important warning. The prevention of thromboses in such cases lies in maintaining good circulatory tone by moderate exercise, and cardiac stimulants if necessary; while the blood pressure may be somewhat above normal, in a patient with these symptoms, it may not be high enough to maintain good cerebral circulation. The patient should avoid large heavy meals, marked exertion or markedly hot or cold baths. Iodides

in small doses are of value. Many of these transient phenomena are probably due to small thromboses.

BRAIN TUMOR AND ABSCESS

The hemiplegia which occurs with tumors of the motor region of the brain may be gradual or sudden in onset. Usually, it begins gradually and slowly increases to a complete paralysis; it may be preceded by localized convulsive movements. Such a paralysis slowly progressive over several weeks is almost always due to a brain tumor. Usually there will be signs and symptoms of increased intracranial pressure associated. Occasionally, a hemorrhage into the tumor will give the first symptom. In such cases, the clinical findings resemble those of a cerebral hemorrhage, and a brain tumor must be considered in all such cases. The history and examination will usually reveal certain clues to the diagnosis. At times, a tumor will cause a subarachnoid hemorrhage, so that one must consider a neoplasm also in that group of cases.

The following case is illustrative:

A male, aged 59 years, seen in consultation with Dr. C. E. Dowman on May 19, 1927, had complained of slight weakness in the left arm and hand since January, 1927. He stated that this had slowly progressed, and was associated with difficulty in saying what he wanted to, which also became progressively worse. A week before he was seen, the weakness in the left arm became markedly worse, and he became mentally confused and semi-conscious. Examination showed evidence of marked arteriosclerosis; there was considerable weakness in the right arm and hand; he did not understand well when spoken to, and there was a right homonymous hemianopsia. The ocular fundi were normal. There was a loss of joint sense in the right hand with an astereognosis. The tendon reflexes were increased on the right side, but the plantar reflex was normal. The blood pressure was 120/80. The characteristic slowly progression of symptoms of a localized brain lesion indicated a cerebral neoplasm; there were no signs of increased intracranial pressure, and the patient had arteriosclerosis, but the symptoms did not progress in the stroke-like fashion that vascular lesions usually do. An oper-

tion by Dr. Dowman showed a large glioma in the left temporo-occipital lobe, which would explain all of the symptoms.

GENERAL PARESIS

Apoplecticiform seizures or "congestive attacks" form one of the classical symptoms of general paresis. They are of sudden onset and resemble a cerebral hemorrhage. The striking thing is that the patient usually recovers completely from his paralysis in a few hours or several days. The basis of these attacks is not well understood but has been ascribed to localized cerebral edema. The diagnosis may be difficult while the patient is unconscious, but the history and further examination will reveal definite evidence of the disease, which may be confirmed by the spinal fluid findings. Cerebral thrombosis or hemorrhage may also occur in paresis, leaving permanent symptoms.

MULTIPLE SCLEROSIS

Transitory hemiplegic attacks are not rare in multiple sclerosis; the hemiplegia may also be of more or less permanent duration. It usually occurs in young individuals with no evidence of vascular disease, syphilis or brain tumor. The diagnosis may be difficult unless other signs of multiple sclerosis appear. The treatment is that of multiple sclerosis.

UREMIA

Various types of apoplectic seizures may occur in uremia. Cerebral and subarachnoid hemorrhage is especially common. In other cases, where the paralysis lasts only a short time, it is believed that the basis lies in a localized cerebral edema. Toxic degeneration of the cortical cells may occur, as reported by Weisenberg. Other cases are thought to be due to a vascular spasm. The diagnosis of uremic hemiplegia is probably made more often than it occurs; as shown by the studies of LeCount and Guy. The diagnosis is usually based on the history, findings of albuminuric retinitis, marked retention of nitrogenous bodies in the blood, and marked urinary findings. The spinal fluid in uremia may show increased cell count, increase in globulin or both; occasionally the spinal fluid is yellowish. The diagnosis of a simple uremic hemiplegia is thus quite difficult, and various types

of vascular lesions as well as brain tumor have to be considered. The treatment is that of the underlying condition.

ENCEPHALITIS AND OTHER ACUTE INFECTIOUS DISEASES

During encephalitis, tuberculous meningitis and other acute infectious diseases, sudden hemiplegia may occur, with or without disturbance of consciousness. The cause of the attack in these cases is usually some type of vascular disturbance, such as thrombosis or embolism. The clinical findings are usually overshadowed by those of the primary disease, such that diagnosis is not difficult. In malaria, transient hemiplegia may occur during the febrile crises, which may be due to cerebral edema. In other cases of malaria, the paralysis is permanent, and probably due to a hemorrhage, or embolism.

MIGRAINE

Accompanying certain cases of migraine, or periodic headache, in addition to various ocular phenomena, there may occur a transient hemiplegia, without disturbance of consciousness. This is usually of rather gradual onset, soon after the onset of the headache. The basis of the hemiplegia probably lies in a vascular spasm. Great caution must be used in the diagnosis of a hemiplegia accompanying migraine, as most of these cases will be found to be due to some organic lesion, such as brain tumor. However, there are a few cases on record, which seem to be true cases of hemiplegia accompanying migraine. Thus, Clarke reported six members of a family affected with migraine from childhood, with transient hemiplegia with the attacks, who were perfectly normal between attacks, and who suffered from no permanent or progressive symptoms. The treatment in this type is the prevention of the attacks of migraine.

HYSTERIA

Hysterical hemiplegia usually begins rather slowly, but may be very sudden in onset, especially after physical injury or emotional shock. There is usually no disturbance in consciousness, although the patient may lie in a trance-like state, with slow shallow respirations, the eyes closed, resisting any attempt to open the eyes. There is no change in pulse or temperature or reflexes. The paralyzed parts are usually flaccid, but may show peculiar

contractures, differing from those found in an organic lesion. On attempting to move the paralyzed part, it will be noted that patient is unable to relax opposing muscles, which accounts for the apparent paralysis. The paralysis is also found to be subject to suggestion. Other hysterical signs may be produced by suggestion, such as the typical forms of anesthesia. A number of tests may be used which will differentiate an organic and hysterical hemiplegia quite readily. The treatment in this type is by psychotherapy.

CONCLUSIONS

It is seen that a number of conditions may be responsible for a sudden hemiplegia, and that rational treatment at the time of the attack, as well as in prevention of further attacks depends on an understanding of the etiologic basis. A careful study of each case must be made.

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ANTIMONY AND POTASSIUM TAR- TRATE IN CHANCROIDAL INFECTIONS

Alfred E. Jones, Chicago (*Journal A. M. A.*, May 28, 1927), concludes that the period of convalescence or hospitalization of patients suffering from chancroidal infections and their complications will be reduced at least 50 per cent if, in addition to local treatment, antimony and potassium tartrate is administered intravenously. The pain, discomfort, discharged edema and other disagreeable symptoms will be perceptibly lessened or almost entirely disappear after the first few injections. A 1 per cent solution of antimony and potassium tartrate is used. An initial dose of 3 cc., increasing 1 cc. with each dose up to 10 cc., with the administration at four-day intervals, seems to be amply sufficient.

RADIUM IN CANCER OF THE CERVIX*

A REPORT OF 58 CASES TREATED IN 1921-22
WITH 31% FIVE-YEAR CURES

C. C. HARROLD, M.D.
Macon

Within the past two weeks I saw in my office in Macon a woman with an advanced carcinoma of the uterine cervix. She told me that seven months before she had seen a doctor who gave her "local treatment" for increased bleeding, and had then had her take some x-ray treatment for the same. This did not do her any good and she then was admitted to a hospital for over three weeks just prior to my seeing her. After having been there nearly four weeks she finally left in disgust at her lack of improvement. She was then seen by another doctor, making the fourth whom she had seen within seven months, and he immediately told her on examining her that she had an advanced carcinoma of the cervix and sent her in for treatment with radium.

One month ago I saw a woman from one of the most prominent and well known families in central Georgia with a carcinoma of the cervix which had extended down from the cervix on to the posterior vault until practically half of the vagina was involved. This was within two days after her first examination by a physician. This woman of good family and education never had the slightest idea what was wrong with her.

Two months ago I was in Randolph County and was told by one of the leading physicians in that territory that he was still at sea as to what was the proper treatment of cancer of the cervix as he had seen some very bad results following radium treatment in non-malignant cases, and he did not know whether radium was the proper treatment or not. He was frankly amazed when I told him what percentages of cures were being obtained by systematic well thought out treatments in the various radium clinics in America.

Such experiences as the above three have prompted me to continue to report my experiences in this very limited field, even if

most of my hearers are probably long since convinced that it is the proper treatment. I think, however, that the chances are that very few of you have taken the time to review the results.

Dr. Thomas Harrold has within the past few months gone over my files for cancer of the uterus cases and has tried to get in touch with the families or the physicians of the various women treated in 1921 and 1922. We find that there were 68 cases treated in these two years.

Out of the 68 cases treated, we have been able to trace 58. Now I do not think it fair to consider the ten whom we have not been able to trace, as being dead. In this group of ten, there is one early case from Taylor County who was living and apparently well after one year, and then the family of tenant farmers moved, and no one knows where they are now. Another patient was a woman who lived for four years, was apparently well at that time and moved to Detroit in 1925. Again it was only after a good deal of correspondence that I located two living cases within the past six weeks. So I am not going to consider the ten missing links, but will discuss the end results in the 58 cases which we have traced.

I do not intend for my figures in this series to be in any way padded or forced. When I place a case as a five-year cure, I mean that at the end of five years the patient is living, and well, with no sign of malignant recurrence. For example, there was one woman who lived four years and three months after treatment, had no signs of recurrence and died with a cerebral hemorrhage. This case goes into the dead group—the group of failures. On the other hand I have a woman with a vesico vaginal fistula of five years' standing, but with no evidence of recurrence. She refuses further attempt at closure, but I am grouping her as one of those living and well of her malignancy.

Before going into the comparative figures which I wish to report, I think that those of you who have not considered the prevalence of this form of cancer and its terrific mortality, should do so. Georgia has now about the same population which Chicago did at her last census. During 1924, there were 386 women in Chicago who died from cancer of

*Read before the Sixth District Medical Society Meeting, Griffin, Ga., Nov. 30, 1927.

the uterus. I think that we can safely say that there were 365 women who died in Georgia last year. Every day between dawn and dawn, one woman dies in our state somewhere between proverbial Rabun Gap and Tybee Light. If the cause of this death was some wild Jack the Ripper or some unknown strangler who came into their rooms at night, why every able bodied man and woman in the state would demand that every agency of the state should stop it. Every military and police organization in our state would be called to arms. The fact that one death was in Habersham and the next in Chatham County would only call for more and stronger efforts to catch and kill the killer. Our state, called poor and almost bankrupt would spend a million dollars in a month to stop these unnecessary deaths. But with a woman dying an unnecessary death from a cancer of the womb, how different it is. She generally is in a back room for months where the family does not have to see her or smell the foul odors from her rotten discharges. When death finally occurs it comes as a boon and a blessing to both the patient and the family. Even the near neighbors if possible are kept in ignorance as to the cause of death which for some reason unknown to me is considered more or less of a disgrace. In this disease more than in any other of which I know, one death does not serve to warn and educate the living. Certainly among our Georgia women, ignorance along gynecological malignancies is distressingly large.

Now my claim is that of the practically one thousand women in Georgia who are doomed to die within the next three years from this disease, that the vast majority of them could be saved by radium, if the women and the doctors only knew: if the women only knew the early symptoms of this trouble, and if the doctors knew in addition to this, that radium if used early has an extremely high cure. I honestly think that if recognized and treated early, that carcinoma of the cervix does not have as high a death rate as pneumonia. If untreated, the death rate is 100%.

I realize that figures are always uninteresting, and I think that they are never excusable unless they are comparative. I am therefore going in this short paper to com-

pare the results with radium, with the results by surgical operation in some of the well known hospitals. I think that probably the best known gynecological clinic in the South was the clinic operated at the Johns Hopkins by Dr. Howard A. Kelly and Dr. Cullen. I feel therefore that if I measure our radium results by the operative results obtained at that clinic when it was at the height of its operative technique, that no one can say that we are measuring by a mean yard stick.

Cullen has carefully studied their results and they compare very favorably with the results by Wertheim and others from the Vienna Clinic. I therefore do not think it necessary to report from others. Cullen from Baltimore shows that practically one-half of the cases presented for treatment at the Hopkins, are found operable. In the old days, the other half were pronounced incurable and were sent home to die the horrible cancer death with which we are all familiar. Now of the half which they found early enough to operate upon, what results does this clinic show? Only 27% of those operated on were living after five years, which means that only 13½% of those presenting for treatment were living after five years. Attention should also be called to the fact that of those pronounced operable, 27% died in the hospital as a direct result of the operation. Attention should also be called to the fact that as any surgeon attempts to broaden his operative group, trying to operate on cases where the cancer has left the cervix at all, that the primary operative death rate rises immediately.

Now when we study the results obtained by the use of radium instead of surgery, what do we find? Let us realize at the beginning, that whereas in the surgical treatment, only the early cases are handled, with radium even the most advanced are treated and to some extent helped. In our group of 58 traced cases we find that after five years there are eighteen of these women still living with no evidence of recurrence. This makes a net cure after five years, of 31% as against 13½% in one of the best hospitals in America.

Again when we study the individual cases we find that in the series of 58 traced cases, there were only 14 early group one cases. Of these fourteen early cases there are 12, or

83% living and well today. Nothing I can say will more definitely show the importance of early treatment.

Time forbids my telling of each case in detail, but there are a few of the cases which I think are worth especial notice.

Case 45. Mrs. C. B. T., age 45, referred to me by Dr. Thomasson of Andersonville in November 1921. This was an advanced case with marked involvement of the vagina. Operation would have been either impossible or would have been exceedingly difficult with extensively increased operative risk. This woman is perfectly well today and weighs 190 pounds.

Case 55. Mrs. H. J. H., age 38, was referred to me by Dr. Jernigan of Sparta in August, 1922. She had had a complete hysterectomy by a well known Atlanta surgeon a few months before for a carcinoma of the cervix, and had commenced bleeding again. When seen by me she had a definite ulcerating nodular recurrence in her vault. I had no idea that the recurrence could be controlled, but gave her nearly 2000 M.G. of radium in her vault. Dr. Jernigan reports that he has examined her regularly and that on his last examination in August, 1927, she was absolutely well with no evidence of recurrence.

Case 28. Mrs. C. F. J., age 34, was referred to me by Dr. X of X county, Georgia. This case is reported to show two things, first the benefit in hopeless cases, and second to show that the profession is improving in its attitude to radium. I first saw this case several months after she had had a radical hysterectomy for carcinoma of the cervix by a member of the cancer commission of Georgia. She had a very rapid recurrence and reported back to her surgeon with the statement that her family physician had advised her to use radium. The reply of the surgeon was that he could do her just as much good with a small white tablet as radium could do and sent her on back home. Her family physician finally insisted that she have radium. When seen by me in January, 1922, this woman was pitiful in the extreme. She had a foul discharge and was bleeding daily. Her entire vault was the site of a foul ulcer and it was

extremely unpleasant to have her in the office. She had become an offense to herself and her family. Radium stopped the bleeding and after a few weeks the discharge became very much less offensive. I have a letter from her sister stating that the last few months of her life were made bearable both to the patient and the family, and in poorly expressed English thanking me in a most pathetic way.

A few weeks ago, after five years I again saw a case of cancer of the cervix which had been seen by this same member of the cancer commission of Georgia and he had referred this case to a friend for radium. I do not know whether he knew better five years ago, or whether he has just learned better since a close friend has purchased radium. At any rate he has evidently stopped operating on cancers of the cervix, as the last case mentioned was an early one with enough money to pay a surgeon's operative fee. So far as this man is concerned I think that his patients have improved just about fifty per cent in five years.

I have not reported the above results with any idea that they are any better than those obtained in any well regulated radium clinic. I do not think that they are, and it may be that in institutions using the combined radium and x-ray treatment as we are also using it at present, that there are even better results. I do think, however, that the doctors of Georgia should know that right here in Georgia there are radium clinics treating cancer of the cervix and obtaining results twice as good in the average run of cases as was obtained by the best surgeons in America by operations a few years ago. I also think that the profession should realize that practically all first-class radium clinics now believe that we will cure from 75 to 90% of all genuinely early cases of cancer of the cervix we see.

Finally, let us realize that radium treatment of a cancer of the cervix is no child's play but is a physical and chemical destruction of a large area of human tissue in a concealed position in the body. The treatment required is from 2000 to 4000 units of radium radiation and causes a huge foul slough. Although the treatment lasts only one or two days it takes several months for the slough to clean up and during this time the discharge

is still or may be quite foul. We should remember that it takes from twenty to forty times as heavy a dose of radium to destroy a cancer of the cervix as it does to destroy the average small skin cancer on the face. Such a dose if placed within the nose would completely destroy it and probably open up both maxillary sinuses.

I firmly believe that in cancer of the cervix the chances of cure with radium are more than twice as good as with surgery. I seriously doubt if they would be much better than with the actual cautery with the exception of fistulae and secondary hemorrhages. I mean that to get as much destruction with the cautery in an hour or half an hour as we get with radium in several months would almost surely open up the bladder or rectum. I also think that with destruction anything like as extensive, that we would be very much more likely to have secondary hemorrhage. I do believe, however, that there is a great future ahead for some electrical destruction of tissues with low heat which can be accurately measured in the tissues. Just how much danger of secondary hemorrhage such work will have is, of course, absolutely problematical.

Up to the present I think that radium (possibly with x-ray as an adjunct) offers the very best treatment for cancer of the cervix, and that if it is applied early we will reduce the mortality from this disease to an almost negligible minimum. As I see it we doctors in Georgia owe a duty to the women in our state in seeing that they are properly informed, and we are not doing our civic duty in leaving this duty to a small hand picked committee of ten or fifteen men.

ACUTE CARDIAC DILATATION

J. H. Clark, Philadelphia (*Journal A. M. A.*, July 2, 1927), reports three deaths occurring in patients shortly after intravenous injections of 10 per cent dextrose solution, and one after physiologic sodium chloride solution. Of the two patients receiving dextrose solution, each experienced chills about twenty minutes after the injection. Their pulses became irregular and feeble, and they died within four and nine hours after the injection. One had received previous injections of dextrose solution without exhibiting such phenomena.

MALTA FEVER

REPORT OF A SERIES OF CASES ADMITTED TO GRADY HOSPITAL

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Atlanta

During the latter part of May and the first part of June a number of cases, subsequently diagnosed clinically as Malta Fever, were admitted to the children's ward of the white unit of Grady Hospital. This diagnosis was not made until the 17th or 18th of June and, in the meantime, a poor time was had by all. My patients looked acutely ill and thoroughly miserable and I was sure of only two things: first, that I did not know what was the matter with them and, second, that they were seriously sick.

Suggestive symptoms of many conditions were present and many tentative diagnoses were made. The trouble was there were too many symptoms. Each diagnosis left a number of these at loose ends and unaccounted for.

Malta Fever takes its name from the island of Malta in the Mediterranean. It has been endemic here for many generations and mention of it goes far back into the mists of early medicine.

In 1887 Bruce isolated the causative organism and gave it the name of *micrococcus melitensis*. He also proved that the goat was the carrier and that man was infected by drinking the milk of infected goats. These goats were symptom free, they lived to a ripe old age, bred normally, and passed the infection on from one generation to the next indefinitely.

In 1924 Auricchio stated that there was a perfect immunologic identity between *micrococcus melitensis* and *bacillus abortus*. The latter is the cause of a disease of cattle. Infected cows have fever, mastitis and abort their calves, which are stillborn. This circumstance makes the cow of less importance as a source of human infection for the reason that the cow has symptoms of illness, and an infected herd will not reproduce itself. The germ eliminates itself, in one generation, by destroying the young of its host.

Kufer stated in January, 1924, that there was a Malta Fever of bovine origin.

Ficai and Alesandrini, writing in 1925, say that the specific agglutinins in a patient's blood are stable at 65 degrees centigrade if the infection is due to bacillus abortus, and are destroyed at this temperature if it is due to micrococcus melitensis.

The "A. M. A. Journal" comments editorially in April, 1925, that several cases of the disease have been traced to the handling of the carcasses of diseased hogs and quotes Darglen and Plazy to the effect that seven cases in Paris were traced to a pet dog which had three puppies, one of which was born dead.

Different workers have isolated the organism from the blood, urine and throats of living patients and from the blood, liver and spleen at autopsy. Since ingestion of the organism causes the disease in susceptible people, I believe that we must assume that infection from person to person, in the same way and to the same degree as in typhoid fever, is possible.

Pathologically, the condition is described as an asepticemia and a bacteriemia. The spleen is enlarged and, in this case, is soft. It is acutely congested and the lymphoid cells in the malpighian bodies are increased. Tyndale and Vico report an autopsy in Salt Lake City in 1924. The spleen was firm and not enlarged. There is congestion of the stomach, liver and intestines. Peyer's patches are not involved.

The other septicemias have certain preferred points of attack. The pneumococcus localizes in the lung, the meningococcus in the brain and so on. Malta fever is catholic in its choice. It may invade any point in the body, with an active blood supply, and give rise to symptoms referable to the part attacked. The result, from the standpoint of clinical diagnosis, is utter confusion.

The following symptoms occurred in all of this series of five cases. In addition there were other symptoms limited to each case.

Acute pharyngitis and tonsillitis; varying from congestion, with dilated blood vessels across the tonsils, to an acute reddening that resembled the throat of scarlet fever.

Middle ear involvement; varying from a slight pinkness of the drum to abscess formation, followed by rupture and drainage.

Pain; the older children complained of headache. The younger ones cried and fretted a great deal.

Fever; this was usually intermittent and occasionally remittent. It varied, in the same case, from time to time. It was always higher in the evening and, when it was intermittent, the morning temperature was sub-normal. It varied from 95 to 105 F. All cases registered a subnormal morning temperature between paroxysms of fever.

Infection of the lungs; varying from bronchitis to massive consolidation.

Enlargement of the spleen; this organ behaved in a bizarre manner; it was here today and gone tomorrow. One examination might find it palpable three or four centimeters below the costal margin and a few days later it might have shrunk to half this size or might have disappeared entirely. Finding an enlarged spleen would seem to be a matter of chance.

All the cases looked stuporous and acutely ill.

The white cell count averaged 12,000 and the polys varied from 35% to 85%.

Three cases had albumin in the urine and one case macroscopic blood. Two of these had edema of the face and the dorsum of the feet.

Three cases had diarrhea. Most of the stools were soft and yellow, the number varied from five to fifteen in the 24 hours. One patient passed fresh blood, mixed with feces, for two days.

One patient had convulsions.

Three had abdominal distention, tense and not tympanitic. There was a doughy resistance suggestive of typhoid or, in children, acute appendicitis. The house staff called for an emergency surgical consultation in one case, because of this latter diagnosis.

One case had swollen and painful knee joints.

One had a toxic rash resembling measles.

Clinical diagnosis is difficult but can be made in some cases. If you have a patient who appears to have tuberculosis, complicated by malaria, Malta Fever is a reasonable diag-

nosis, provided the blood is negative for malaria. The trouble is that so many cases ape the symptoms of so many other conditions. A diagnosis by exclusion is an endless process.

Chromacho stated in 1918 that Malta Fever masquerades as pulmonary tuberculosis, typhoid, chronic rheumatism or meningitis and that joint inflammation is so common as to be a symptom rather than a complication.

Cignozzi, writing from Naples, says that every case of hip joint disease, which seems to be typical of tuberculosis except that it shows a tendency to heal, should be tested for Malta Fever.

Positive diagnosis is said to be possible by an agglutination test similar to the widal. Dilutions should be 1:100 to 1:1000.

Dr. A. J. Ayers kindly obtained cultures of micrococcus melitensis and bacillus abortus. The agglutination tests were done under his supervision by Drs. Boswell and Jackson, to whom I am much indebted.

The blood of one patient, D. R., agglutinated both organisms in a dilution of 1:100 at the end of an hour. The others showed no agglutination in a dilution of one to twenty.

Several days later the patients were clinically much improved and the test was repeated to see if the lapse of time and a different dilution would give a different result.

The four serums, which were formerly negative, agglutinated both organisms in dilutions of 1:100 and 1:500, but this was seen at the end of 15 hours' incubation. There was no agglutination at the end of one hour and none at the end of four hours.

Trenti of Rome, reported a skin test in 1923, .1 c.c. of a filtrate from a twenty-day broth culture of the organism is injected intra-dermally. A positive reaction consists in the formation within six hours of a raised plaque at the site of injection. This is red, pale or light gray and from four to six c.m. in diameter.

Dr. Ayers is preparing this culture.

Some authorities say that the complement fixation test is the surest method of diagnosis.

The important thing to us about these cases seems to me to be this: as long as Malta Fever is present in a community the diagnosis of a number of the diseases common in our practice is unsafe until it has been ruled out.

The mortality is given as three per cent. There was one death in this series. The case is not included among the five mentioned because no agglutination test was made. This child was three months old, weighed 4¼ lbs. and was clinically syphilitic. Syphilis was the chief cause of death. The twin sister of this case, although equally emaciated, recovered in spite of an intractable diarrhoea extending over several weeks. One unusual finding here was that the child gained 15 ounces while having seven bowel movements daily. Only the syphilis and the diarrhoea were treated.

Therapeutic measures recommended are: autogenous vaccine, antitoxic serum, methylene blue by mouth; 2% collargol solutions, intravenously and arsphenamine, also intravenously. Since the disease is a septicemia and the organism is gram negative, treatment with mercurochrome after the method advocated by Dr. Hugh Young should give good results. However, it is to be remembered that the mortality in this condition is low. One writer reports five hundred cases with no deaths. If mereurochrome is used indiscriminately the treatment will probably kill more patients than the disease.

A worthwhile opinion on any type of treatment will necessitate experience with many cases and the lapse of considerable time. The disease is undulant and consists of recurrent waves of fever. Any one of these may be the last. A patient may recover in a few days or be sick for two years. It would seem to be almost impossible to tell whether a given treatment did any good or not, under these circumstances.

Don Ross: Admitted April 24th. No history. The child was found abandoned in a railway station and sent into the hospital.

Physical: The patient appeared to be about four years old and was obviously an idiot. He was emaciated and his chest showed marked bony deformities from rickets. Reflexes were exaggerated. The arms were somewhat spastic and the legs markedly so. The upper teeth were decayed. He appeared blind and Dr. McDuffie reported a probable primary optic atrophy. The skin was dry, the abdomen scaphoid and the liver and spleen not palpable. Urinalysis was negative. Spinal fluid was clear with a cell count of seven and

no increase of globulin. The Wassermann was negative. Blood showed red cells, 3,850,000. White cells, 7,600. Hemoglobin, 70%. Differential count was normal except for a 2% eosinophilia.

For eight days after admission the temperature ranged from 98.1 to 99.1. On the following day it was 97.4 in the morning and 102.4 in the evening. The patient had not had a bowel movement in 48 hours and examination disclosed an inflamed throat and engorged blood vessels across the right ear drum.

Cathartics were administered and the temperature remained normal for the next three days. The bowels were kept open with mineral oil.

For the next five days the temperature varied between 98 and 100.4. Then the child had fever of a remittent type for the next month. It was normal or subnormal each morning and rose to 104 in the evening. At no time was it high in the morning. During this period the spleen enlarged and was palpable three or four centimeters below the costal margin. It varied rapidly in size from day to day. The liver was not palpable.

Examination of blood smears for malaria were negative. Quinine was administered for fifteen days without any effect on the fever. The Von Pirquet test was negative.

Dullness and subcrepitant rales were found at the right apex with scattered areas of dullness in both lungs. An x-ray report was asked and Dr. Landham reported: "This has the appearance of an advanced pulmonary tuberculosis, probably miliary in character."

Late in the month there was an increase in bowel movements to four a day.

At the end of this time the temperature dropped to 95 in the morning and remained normal or subnormal for the next fifteen days. Clinical evidence of consolidation in the lungs cleared up, except for a small area in both bases posteriorly.

At present the child's general condition appears to be as good as it was on admission.

During the course of his illness a clinical diagnosis of malaria was made and, later, a clinical and x-ray diagnosis of tuberculosis.

Subsequent events seem to make both of these untenable. Lastly a clinical diagnosis of Malta Fever was made. The patient's blood agglutinated both bacillus abortus and micrococcus melitensis.

In this instance agglutination took place promptly in dilutions of 1:40 and 1:100.

James Watts, age 4.

Admitted June 26th with provisional diagnosis of empyema, broncho pneumonia, tuberculosis, lung abscess.

Past history contained nothing of importance except exposure to tuberculosis.

Present illness of three weeks' duration. His mother stated that he had had fever, cough and poor appetite for three weeks and had refused all food for the last three days.

Physical: The child was emaciated and looked acutely ill. He was comatose but whined continually as long as he was disturbed. There were physical signs of consolidation in the chest. The abdomen was distended and dull on percussion. The spleen was much enlarged and appeared tender, the notch was not felt.

The urine had a specific gravity of 1010, was alkaline and showed ten pus cells to the low power field.

On June 2nd blood examination showed 11,200 white cells. Polys, 70%; small lymphocytes, 18%; large lymphocytes, 12%.

On the same day the report of an x-ray examination of the chest was "probably an unresolved pneumonia."

June 5th another blood count showed 11,900 white cells. Polys, 58%; small lymphocytes, 24%; large lymphocytes, 12%; eosinophiles, 2%, and transitionals, 2%.

June 6th x-ray report on chest was "no definite evidence of lung pathology."

June 7th the stools were reported negative for eggs and worms and a blood culture was sterile after forty-two hours' incubation.

June 17th the Von Pirquet skin test was negative.

From admission until June 30th the child ran an intermittent or a remittent temperature. For most of the time the morning temperature was normal or subnormal. The spleen was palpable but varied in size. His right ear drained thick pus and this drainage

had no apparent effect on his fever. Rupture took place on June 18th.

He constantly had a diarrhoea; from six to sixteen stools daily. At first these were green and of an offensive odor. For two days, shortly after admission, they contained much blood. He vomited occasionally and would not eat. Gradually the character of these stools improved. June 30th he had six, the color was yellow, his temperature varied between 98 and 101.2, his appetite had improved and he was sitting up in bed, playing. The abdomen was softer, but still distended; the liver and spleen were not palpable.

Walter Dodd, age 6.

Admitted June 6th. Chief complaint, fever, soreness about ears. Admitting diagnosis, otitis media and mastoiditis.

Past history: Was said to have had diphtheria and to have developed scarlet fever four days later. He recovered six weeks before the onset of the present illness.

Present illness: Onset a week ago with a head cold. For the last five days he has had fever up to 103 and 104 F. Has complained of headache. Has vomited occasionally and has had a cough.

Dr. McDuffie was called because of the diagnosis of mastoiditis. He reported the right ear drum slightly reddened and the throat slightly irritated and suggested that the child had pneumonia.

June 6th Dr. Landham reported on an x-ray of the mastoids and stated that there was no evidence of disease.

Blood count was white cells, 13,600; polys, 67%.

June 7th meningeal symptoms were present and a lumbar puncture was done because of a provisional diagnosis of meningitis. The cell count on the spinal fluid was ten, it was sterile and the Wassermann was negative.

June 11th the patient had a follicular tonsillitis and his spleen was palpable. A day later he had clinical evidence of consolidation in the right chest.

X-ray was asked and on the 13th Dr. Landham reported "this is probably a bronchitis."

Blood count next day was white cells, 25,600; polys, 67%.

The urine contained a few granular casts.

By June 20th the right chest was flat on percussion and breath and voice sounds were barely audible. The apex of the heart was located in the fifth space some two centimeters beyond the nipple line.

A diagnosis of fluid in the chest was made.

June 23rd Dr. Landham reported on another x-ray: "This has the appearance of an unresolved pneumonia." Meantime, thoracentesis had been done and no fluid found. Examination of the x-ray showed a large heart.

Blood count at this time was white cells, 16,000; polys, 56%.

The patient developed swelling of both knees with much pain and tenderness. The swelling did not fluctuate and the skin over the joints was not reddened. This subsided in about a week, either because of or in spite of treatment with salicylates.

During all this time the patient ran a septic temperature, most of the time intermittent and ranging from 96.4 to 104.3. He has been improving slowly since June 18.

June 30th the lower part of the right chest was still dull but the child was sitting up. The distention of his abdomen was less and his spleen was not palpable. His temperature at noon was 99.2, pulse was 120 and respiration 24.

Thomas Brown, age 14 months.

Sent in from the Salvation Army Home with no history except that he had had recurrent attacks of pneumonia (five or six in all) and had spent much of his short life in the hospital.

This child had a yellow skin and looked anæmic. Both lungs were full of coarse, bubbling rales. His abdomen was distended. His liver was much enlarged and his spleen was always palpable but varied in size.

His bowels were loose and his fever was remittent, varying between 98 and 104 daily. His blood count was 11,200 whites with 66% polys. On this occasion an x-ray of his chest was negative although pneumonia had been diagnosed on previous occasions.

In other words, the child had recurrent attacks of intermittent fever, accompanied by enlargement of the spleen and inflammation of the lung.

Jerry Jay, age 3 months.

Admitted with a history of diarrhœa.

Blood count showed 10,500 whites with 57% polys. He had rales and scattered areas of dullness in his lungs; seven to fifteen green, fluid stools daily and a remittent fever between 98 and 103 for a period of eighteen days. At present his temperature is normal and his spleen not palpable. He is recovering from one attack and may or may not have another one.

Medical Arts Bldg., Atlanta

THE PROPHYLAXIS OF DIARRHŒA*

J. J. CRUMBLEY, M.D.

Sylvester

An ounce of prevention may be worth a pound of cure, but there is a vast difference between what a thing is worth and what that thing will sell for. From a money-getting standpoint the direct potentialities for such, with which this paper has to deal, is far from alluring. Howbeit, the primal stone upon which our profession first stood was one of mercy rather than a mercenary one. There may be outcrops of commercialism here and yonder in the profession, but its days are as grass, for it is soon cut down by the ever alert humanitarianism of the profession and early withers away. The first tenet of our profession is the welfare of the patient or the potential patient, rather than the financial reward that one might receive.

In summer complaint, bowel trouble, diarrhœa, or so-called teething there is presented the greatest field with which preventive medicine can be confronted. It is greatest not alone from the standpoint of morbidity, but of mortality as well. Those of the profession who practice in the congested centers of population where the supply of mother's milk is early curtailed by the economic necessity of her assuming her position in the productive world of finance as early as possible are called upon more frequently to handle a diarrhœic situation. However, we in rural and semi-rural practice have many cases of that kind.

The question of eugenics is not one to be left out if one would obviate even the not too remote causative probabilities of a few diarrhœas. There is a diarrhœa variously classified as nervous or henteric the efforts at prevention of which should have begun several generations back. However, it would not surprise me if many of the so-called nervous diarrhœas were thoroughly studied a real reason would appear. To make that diagnosis is much like making a diagnosis of hysteria. Many of the so-called states formally regarded as hysteria have, upon thorough investigation, been found to be otherwise. I distinctly recall two cases of diarrhœa that matched very closely the classical symptomatology of henteric diarrhœa that very promptly cleared up when a change from hard to soft water as a diluent for the artificial feeding was made. However, in that class of nervous diarrhœa in which everything primal, remote, scientific, and unscientific has been resorted to in an unsuccessful effort to correct then it is that we may say that mental hygiene or prophylaxis for several antecedent generations might have been a circumvention of or a preventative for.

Generally speaking, taking it for granted that the character of the mother's milk falls well within the class of good milks, the greatest single factor as a preventative of diarrhœa is regularity of nursing. This applies more to regularity of nutritional needs of the particular child in question than to time regularity. If a child is nursed when he is hungry, rather than the nipple be used as plug to block the emissary of annoying sounds, that child will get along just as well as the baby who is nursed by the exactitude of the finest jeweled watch that skilled hands can construct.

Well do we appreciate the fact that the character of mother's milk is subject to variations of as wide or even wider fluctuations than the milk of any mammal according to her diet, and much greater variations from the psychical standpoint. Broadly speaking, a mother's diet should, according to class, come within the limits that would ordinarily be regarded as a balanced one, and in the exceptional case should be balanced according

*Read before the Second District Medical Society, Thomasville, Ga., Oct. 8, 1926.

to the needs of that particular mother. In speaking thus it is readily perceived that there is no real iron-clad mathematical rule by which this can be unvaryingly determined. However, I think the profession is pretty well agreed in that the physical and the mental hygiene of the mother should be safeguarded with much more perspicacity than regulation of diet if it is desired to produce a milk of much sameness of character.

I think that to Roger H. Dennett of New York City should go the chief credit in simplifying the question of artificially feeding infants. He has quite ably demonstrated to the profession that the digestibility of cow's milk is greatly facilitated by boiling. With appropriate water dilutions he boils his milk and gradually builds up the caloric units thereof to that necessary for the maintenance of and the growth of the particular infant under consideration. Alkalinization was formerly resorted to for the purpose of enhancing the digestibility of milk, but I believe that it is about to be supplanted by cooking.

Through investigations done by the Rockefeller Institute and the Health Department of the city of New York, the opinion has been arrived at that bacterial contamination of milk does not greatly interfere with its digestibility. The number of bacteria which milk may contain before it becomes noticeably harmful to the average infant in summer is not at all uniform. However, of the unusual varieties present no very noticeably harmful results are seen until the count is around a million per c.c. In counts greater than this trouble is usually on hand in the majority of instances and in lower counts there are other factors that seem of greater importance. In children three years old and beyond, bacterial contaminations of many millions per c.c. have been known to be tolerated by a group of many children without there appearing diarrhoea of any consequence in a single child. Where diarrhoeas appear in babies who are fed milk greatly contaminated with bacteria, it is not certain whether the diarrhoea is due to endotoxins or to exotoxins or to the lower fatty acids as a result of sugar or fat destruction or digestion when raw milks are being fed. If we except the infectious diarrhoeas or dysenteries then there is no particular bacterium that is thought to be causa-

tive. Pasteurization of milk, though, has been the sheet anchor for many a baby that was otherwise headed for the morgue.

Diarrhoeas are much more prevalent in the summer months than when the weather is cold. The exact reason for this has not yet been decided upon. Holt thinks that even though excessive bacterial contamination is the causative factor in many diarrhoeas the majority is due to other and greater factors. He thinks that atmospheric heat especially the stagnant heat of houses is of first importance. He states that this may act by so interfering with normal digestion and metabolism as to lead to the formations within the body of injurious substances that excite a diarrhoea; or it may favor the excessive growth of bacteria ordinarily present in the digestive tract. Personally I cannot but feel that many of the diarrhoeas met within hot weather, especially in those cases where there has been reasonable supervision of the source and the preparation of the food, is but an expression of nature's effort to rid the gut of what is temporarily a caloric excess in the diet. And as a prophylactic measure there should be a reduction in amount fed to a baby during periods of marked elevation of atmospheric temperature and more especially when the humidity of the air is concomitantly high.

The diarrhoeas that men like ourselves are oftenest called upon to treat and could best be avoided are the ones seen in babies and young children whose mothers are feeding them things other than the breast or the bottle. I believe that practically all mothers with a minimum amount of instruction could within a very short time master all the principles necessary to properly feed their babies and never be really bothered with a diarrhoea of any consequence. I claim no originality, neither can I say where nor from whom I acquired the following principles, but I would like to cite them and I believe if doggedly adhered to will in practically all cases do away with those diarrhoeas usually met with in the latter part of the first and during the second year of a child's life:

1. Whatever is fed a child must reach his stomach in a finally divided state. Furthermore, it must remain finely divided until the process of digestion is finished.

Under the head of the division of food I

will place the cooking of food. All foods cooked must be properly and adequately done. From a diarrhoeic standpoint cooking of food is primarily a procedure to better insure a finer division of food.

2. There should never be more than one new article of diet added at a time and no further addition should be made until it is definitely determined that that article agrees perfectly in both kind and amount with the child.

3. The first addition should be very small in amount—say one level teaspoonful—and this amount should be gradually increased day by day until after ten days or two weeks the child is taking a reasonably adequate helping of that food. In other words, you develop within that child a tolerance of, or an immunity against that article of food. When this is done then another article can be added to babies diet after the same fashion. This method can be pursued until the baby is safely taking care of any number of foods. A baby should be fed those articles that would be regarded as a balanced ration for such age and tenderness, even though by this method it is possible for him to be fed most anything without a resulting diarrhoea. But we, of course, should not give him a “shot-gun” line of diet else there be a revolt in the chemical laboratory or the little gut of the child.

The principle is very much that of giving strychnine to anyone, e.g., a person could be given a small but gradually daily increasing amount of strychnine until after six or eight weeks you would have him taking an amount of strychnine at one dose which if administered to an individual whose tolerance had not thus been stepped up would kill him.

Mothers should be told that upon the advent of looseness of babies bowels there should forthwith and immediately be a reduction if not an absolute withdrawal from the diet those articles that would be most likely to accelerate such a condition, e.g., fruits and fruit juices, vegetables and vegetable soups, fresh meats and meat broth if she would head off a more protracted and serious digestive disorder.

Dr. Crumbley (closing): Someone has ably if not aptly said there is nothing new under the sun. The medical profession is certainly well to the fore-front of professions at whose heads there flies the banner inscribed “Onward, upward and forward.” Our mails, our desks, and our libraries are crowded with medical writings of every kind and sort. These are all very well, for they stand for progress and advancement, but in our eagerness to acquire the new, let us not bury in the trash-heap of the forgotten past those things of proven worth. To the “black mam-mies” of yester-year would I like to turn and say, “To you should be given the credit for that idea that early we give a taste of this food and a taste of that food and ere long the baby is eating.” Just that principle of developed tolerance of which I last spoke.

A STUDY IN TUBERCULOSIS*

A. M. DIMMOCK, M.D.
Atlanta

In making this study in tuberculosis I have reviewed the charts of 738 patients, both white and colored, seen by me at the anti-tuberculosis clinic during the past few years. In this study certain results have been noted which I wish to present for your consideration. For the most part these cases were seen by me alone while in some, other members of the staff were called in consultation.

The study of tuberculosis has held the attention of medical men for many centuries. It becomes more interesting in proportion to the time and attention one gives to it. Since the discovery of the tubercle bacillus in 1882 by Koch, great strides have been made in handling the disease and within the past twenty years the mortality rate has been practically cut in half. Before the discovery by Koch, however, earlier in the 19th century, Laennec, discoverer of the stethoscope, advanced the knowledge regarding tuberculosis a great deal. He was a consumptive

*Read before the Fulton County Medical Society, Atlanta, Ga., Nov. 17, 1927.

himself and he correlated his clinical findings with the morbid appearances at autopsy. He also taught how to recognize, at least to some extent, consumption by an examination of the chest.

The marked reduction in the mortality rate of tuberculosis is due to many factors but two of the most important, I think, are first, the interest shown in the disease by a greater proportion of the profession than was formerly the case and second because of a better understanding of the disease.

When a patient presents himself or herself at the clinic a careful history is taken as per the chart I have passed around. The temperature, pulse and respiration are recorded, weight and height taken without shoes and the per cent of over or underweight is determined. He is then sent to the doctor for examination. In practically every case one or more sputum examinations were made, in a great majority of cases a Wassermann and urinalysis and in many stereoscopic films of the lungs were made. In only the very evident cases was a diagnosis made on first visit while in the great majority of cases a diagnosis was arrived at only after a careful consideration of the history, physical findings on two or more examinations, a study of the temperature-pulse record together with the laboratory findings.

Of the 738 cases seen 554 were whites and 184 colored. Of the whites 37.3% were positive, 54.8% negative and 7.7% doubtful. The doubtful cases were those who showed signs and symptoms suggestive of tuberculosis but who did not return to have their cases fully worked up. For comparison of the colored cases 32.6% were positive, 63% negative and 4.3% doubtful. We will now consider the positive cases only which were 267 or 36.1% of the total studied.

Exposure to infection is conceded to be of great importance and my figures show that 29.6% admitted had been exposed to the disease. Of the white cases 33.1% admitted exposure and only 16% of the colored. This difference is probably due to the fact that the negroes are not aware of exposure as often as the whites.

You may compare family history with ex-

posure or consider it alone, in either event we find 20.8% gave a positive family history, 24.6% for the whites and 7.5% for the colored.

Tubercle bacilli were demonstrated in the sputum of 31.8% of the positive cases. The white patients showing a positive sputum in 21.7% and the colored cases in 60%. This, of course, is a very high percentage in the colored cases and just why it should be so much greater than in the whites I am unable to state. A partial explanation might be found in the fact that a larger percentage of the colored were far advanced. These figures would indicate then, that in the negroes you have a much better chance of obtaining a positive sputum than in whites and as a whole you have approximately one chance in three of getting a positive sputum in definite tuberculous individuals.

The temperature readings in suspected and positive cases of tuberculosis are always very helpful and valuable. I think most of us are in a habit of considering all cases of active tuberculosis as having more or less fever and while it is true that this is a fact in the great majority of instances we must come to realize that once in a while a case is going to come along which shows practically no increase in what is considered the normal temperature. The saying "There is no always or never in medicine" comes very close to being a true statement and I think we have here a very good example, namely, that with tuberculosis you do not always have fever. I have not the time to discuss this phase of my study at length but will submit my findings. Of my 267 positive cases 22% showed a temperature of 99° or below. Now it is true that a majority of cases showing such a temperature had only one reading but I find that 8.2% were seen and had their temperature taken on two or more occasions. I simply took a temperature of 99° in order to allow for the females (who normally are supposed to run a little higher) and to allow for excitement, exercise, etc. In each case a one-minute thermometer was held in the mouth, under the tongue and with lips tightly closed, for at least three minutes. Another point well to mention is that all temperatures were taken between 1:30 and 3 P.M. Some of these were seen over a

long period and many different times and if they showed at any reading a temperature above 99° they were, of course, not included.

I did not deem it of sufficient importance to make a detailed study of the pulse rate but I did find that the average, including all cases and, of course, all stages, was 99.8.

A Wassermann was reported on 207 of the 267 positive cases and of those reported 15.9% were positive and practically all of these were four plus. As you would expect a larger number were positive in the colored, 34.8%; while 10.9% were positive in the whites.

It is a fairly well known fact that in most cases of tuberculosis the right lung is more often or more greatly involved than the left. In my series 70.3% showed involvement in the right lung alone or to a greater extent than the left. And while I have not the figures I can safely state that a great majority showed bilateral involvement.

In all suspected cases of hook worm a stool examination was done and in the series two individuals were found to be positive. That is, two cases had a definite tuberculosis plus a hook worm infection. And you will bear in mind that all my cases were above twelve years of age.

Likewise I found five cases of tuberculous with an associated hyperthyroidism. Of course a great number of positive cases had other conditions in association. It is a great mistake, once you have made a diagnosis of tuberculosis to stop there and go on with your treatment, but it is always important to continue searching for additional trouble.

As has often been stated it is wise to consider blood spitting evidence of tuberculosis unless proof to the contrary is forthcoming. True it is that in some cases it can and is proven to be not indicative of tuberculosis. In my series of positive cases 27.2% gave a positive history for hemoptysis.

It is my opinion that syphilis of the lungs, either alone or in conjunction with tuberculosis, occurs somewhat more frequently than we expect. Of the 738 cases reviewed 5.2% showed evidence of syphilis of the lung, the colored cases showing 8.1% while the whites showed 4.3%. The 5.2% includes all cases—those occurring alone and in conjunction with tuberculosis.

Just as a matter of interest I wanted to determine how many people coming to the clinic suspecting they had tuberculosis did not show that condition but did show cardiac trouble. This proved to be 3.6%. This figure does not include, of course, those suffering from heart trouble in conjunction with tuberculosis.

Our history blank does not ask the specific question as to whether or not the patient has ever had an anesthetic but it does ask about previous operations. From this I was able to learn that 16.1% of my positive cases had taken an anesthetic and from the nature of the answers I am reasonably sure that practically every one of these anesthetics was ether. Whether or not either anesthesia has any effect on the lungs and if it has just what that effect is does not come within the scope of this paper. I simply submit the above findings in this respect for your consideration.

Now as to the stage of the disease at the time a diagnosis was made:

| White cases | Colored cases |
|-------------------------|---------------|
| Incipient—26.5% | 13.8% |
| Moderately advanced—59% | 53.4% |
| Far advanced—14.4% | 32.7% |

You will see from these figures that the incipients were approximately twice as many whites as colored while the far advanced showed more than twice as many colored as there were whites. In Atlanta and in the South there are a great many negroes and their contact with the whites as servants is more or less close. To cut down this high percentage of far advanced, and moderately advanced cases among these people is, as I see it, more a matter of education than anything else. And I am of the opinion that work done among the negroes will reflect to a decided advantage on the whites. Considering the whole group we find that 23.5% were incipient, 57.7% moderately advanced and 18.8% far advanced.

We all recognize the fact that the greatest benefit to be given those unfortunate enough to develop tuberculosis can and must be given during the early stage. I make a plea, therefore, to all of you, to use your influence with the public that they might be made to realize the importance of an early diagnosis and further I ask that all cases, even suspected of having the disease, be carefully and thor-

oughly studied and be very sure that they have not the condition before you tell them so. I well realize that to place a diagnosis of tuberculosis on any individual is, in a sense, a serious thing, but it is far better for the patient for us to be mistaken and tell him he has an early tubercular condition when he hasn't than to allow him to go his way feeling his lungs are perfectly all right when they are not. If there is to be a mistake at all let it be on the side of safety.

My experience has been that in a great many of the early cases it is difficult to make the patient believe you when you give him a diagnosis of tuberculosis, but if we are to continue the good work that is being done in this field of medicine we must have the courage to make such a diagnosis. I am fully convinced that a greater number of people who have a definite tubercular lesion, though early, are allowed to slip by, so to speak, than those who do not have the condition and are incorrectly diagnosed.

Cough has long been considered one of the most constant symptoms of tuberculosis. That all cases do not have a cough, or if they do it is not admitted, seems evident from the records reviewed. Of the incipient cases 13.6% denied a cough, 11.1% of the moderately advanced and 8.6% of the far advanced. For some of us it is probably difficult to see how one might have a pulmonary condition of this nature and not have a cough and yet if we refuse to make a diagnosis because this symptom is lacking the above figures would indicate that often we would be mistaken. Medical men are realizing more and more that in a very large number of cases the diagnosis of tuberculosis is not to be made on a consideration of one or two points but only after a careful summing up of all the evidence available.

In my cases studied none were younger than twelve years. In both whites and colored the greatest percentage of positive cases were from 20 to 29, in the whites 34.2%, in the colored 56.8%. The figures for the total are as follows: 12 to 19, 10%; 20 to 29, 39.5%; 30 to 39, 29.8%; 40 to 49, 13.3%; 50 to 60, 7.2%.

While my cases include adults only and the greatest percentage of positive cases were

from 20 to 29 years of age the fact remains that there is a very great field open and a really great amount of work to be done among children in reference to tuberculosis. I mention this for the reason that I do not wish to leave the impression that one is not likely to develop tuberculosis until he becomes grown, so to speak.

In closing I wish to submit a few general remarks and findings which might prove of some interest. Of all the cases studied only one, a white man, showed evidence of trouble in the bases of his lungs with no demonstrable pathology in the apices. One colored case, seen only once, had a temperature of 98°, a pulse of 80 and denied a cough. She was sent to Battle Hill and died of tuberculosis in two months. I saw one case of tubercular pneumonia with a temperature of 103.3°, pulse 132 and this case died at Battle Hill in two months. One case came in with a tubercular effusion. There were three cases with a four plus Wassermann and a positive sputum, one case with a three plus Wassermann and a positive sputum and two cases with a two plus Wassermann and a positive sputum. These were all colored cases.

There were three cases with a four plus Wassermann and a negative sputum but who had evidence sufficient for one to make a diagnosis of tuberculosis in addition to their syphilis. They were all treated at Grady Hospital for their Lues and later sent to Battle Hill where they died of tuberculosis.

TRIPHAL: BY-EFFECTS

VON DR. A. FREUND

Deutsche med. Woch. No. 41, October 8, 1926,
p. 1735

The author is of the opinion that reactions following the use of Triphal are due to the use of amponed solutions. In more than 500 injections reported on by his assistant no by-effects such as urticaria, itching, collapse were experienced when the solution was prepared at the time of injection from Triphal powder. He strongly advocates the latter procedure but cautions against the use of Triphal generally in abdominal tuberculosis.

A HUGE OSTEOMA OF THE PELVIS

H. W. BIRDSONG, M.D.

Athens

I present this case on account of the rarity of its location, and its enormous size. It is not infrequent to find an osteoma in other parts of the body, but in my sixteen years of practice this is the only one I have seen of the pelvis.

An osteoma is a tumor which is composed of osseous tissue and may be either compact or cancerous in structure, and is produced from a congenital or post-natal matrix of osteoblasts. Osteomata usually take their origin from some part of the skeleton, but they are also found in parts and organs that have no genetic relations with the skeleton, as in the brain. In this particular case I think the origin is from the sacro-iliac joint, but on account of the pelvis being so completely filled with the mass, it is impossible to get the examining fingers far enough around the tumor to determine its origin, and the patient is too thick for the X-ray to show a lateral view.

The two varieties of osteoma, according to their structure, are osteoma durum and osteoma spongiosum. Osteoma durum is a tumor which is almost identical with compact tissue of bone. Osteoma spongiosum is composed of cancellous tissue and comprises the majority of bone tumors, this type usually gets its origin from the epiphyses of long bones. From the appearance of the radiograph, I am of the opinion that this is of the latter type.

This is undoubtedly a benign tumor, and of slow growth, as I have had several X-ray pictures made from time to time during the past three years, and so far, I am unable to note any changes in outline or density in these pictures.

Operation in this particular case is out of the question, therefore no treatment advised.

The case follows: Miss B, a stenographer thirty years of age, came to me in the latter part of the year of 1923 for relief from dysmenorrhea and menorrhagia.

Family History: Father died at 62 years of age from apoplexy. Mother living, age 81,

has rheumatism otherwise health is good. Four sisters living, three have good health, one invalid for the past ten years, due to some kind of nervous disorder, but doesn't know just what. One sister died at the age of 25 of acute nephritis. Three brothers, all living and all have good health.

Past History: Had tonsillitis at the age of twelve years. Had pneumonia in 1913. Puberty began at the age of fifteen. Periods have always been a little irregular, and most of the time were too often.

Present History: Began about two years ago when she noticed that her menses began to stay on too long, sometimes lasting two to six weeks, and kept growing worse until the present time (1923). There are times when they stay on as long as two to three months, not so much at a time, but continuously. Complains of back being weak most all the time, has backache with each period, with pains extending down the thighs. Suffers some with constipation, and has a lot of gas in the lower abdomen. She does not suffer enough to go to bed, or even quit her work.

Physical Examination: A very stout robust young lady weighing 200 pounds, having more or less masculine features.

Head: Eyes—Pupils equal in size and react to light and accommodation. Ears and nose negative. Has some carious teeth, tongue slightly coated. Throat shows a slight granular inflammation, but tonsils are negative. There is no enlargement of the thyroid or cervical glands.

Chest: Expansion equal on both sides, breath sounds clear and the patient breathes easy and regular, no rales heard on auscultation, no dullness on percussion. Heart normal in size and position, both sounds clear and regular, apex beat in the 5th interspace inside the midclavicular line.

Abdomen: Very prominent, and has a slight amount of tympany. Liver dullness normal, and there is no tenderness over the gall bladder. Spleen not felt. On palpation there is more or less tenderness in the lower part of the abdomen, but no mass can be felt. The abdomen is otherwise negative.

Vaginal Examination: Vulva normal.

Perineum normal.

Vagina normal.



HUGE OSTEOMA OF PELVIS

The above picture was made July 20, 1927, and is identical with the first one of this series made in 1924

The examining finger, just after entering the vagina, comes in contact with a very hard mass, more or less nodular, and seems to fill up most all of the pelvic cavity. It is very firm and absolutely fixed, and feels as though it might be a bony outgrowth from the sacrum. The cervix is very small and soft, and pushed up just behind the symphysis pubis. The uterus is pushed up so high that it can not be felt. There is no tenderness anywhere in connection with the mass. Rectum negative.

Urinalysis: Sp. gr. 1.020. No albumin. No sugar.

Blood examination not made.

X-ray Report: There is a large osseous mass in the pelvis, ameboid in shape, roughly round, dimensions 13x15 c.m., its greatest distance being transverse. The large part of this mass is very dense and shows no variation in density being more dense than pelvic bone.

To the left of the dense mass there is another area of lesser density and more irregular in appearance, apparently continuous with the denser body, and extending upward to the area of the sacro-iliac joint. The entire growth, on stereoptic examination appears to be in the posterior aspect of the pelvis against the sacrum. The exact nature of the growth is not evident. The possibilities are dermoid cyst of the ovary, calcified fibroid of the uterus, or osteoma. The available evidence points toward the latter as a more probable diagnosis. The X-ray appearance suggests that the growth is not malignant.

The last X-ray report was made July 20, 1927, and shows no changes since the first was made in 1924 as just read above.

Diagnosis: Huge Osteoma of the Pelvis.

Report from Dr. J. C. Bloodgood, June 26, 1924, is as follows:

"I have never seen such a thing before. It looks more like bismuth than bone. Of course operation is out of the question."

Diagnosis: Bone tumor. Huge osteoma in pelvis.

DIURETICS IN ASCITES

CASE REPORT

J. W. DANIEL, M.D.

Savannah

In all cases of cardiac or renal disease which are complicated by ascites and anasarea, the eternal question arises as to what is the best diuretic. The case to be reported will show the effects of digitalis, novasurol, ealomel, and pills of bile salts.

Patient, male, age 67, farmer, called at office on March 26, 1926, complaining of shortness of breath on exertion; could not sleep the entire night, had to get up and sit in chair to breathe; eating caused a feeling of fullness and distress in epigastrium; had gained considerable weight within last few months. Teeth badly in need of attention; tonsils normal; heart-valvular sounds normal, second aortic accentuated, apex fifth interspace five inches from mid line, rate 90, rhythm regular, rales at base of lungs. Extremities very edematous, abdominal wall edematous, fluid in cavity. Blood pressure 210/120/90.

Blood Chemistry—sugar 214 mg., chlorides 575 mg., non-protein nitrogen 38 mg. Urine—morning specimen, sp. gr. 1010, albumin.

Diagnosis: Hypertension with failing myocardium, kidney condition secondary.

Treatment: Rest in bed, basic diet, Tr. strophanthus.

Patient returned home same day, followed instructions for a limited time with much improvement. Discontinued treatment, returned to work, with the result that reserve force in heart soon became exhausted and rest force was not sufficient to carry him along.

On August 19, 1926, patient returned in a desperate condition. Abdomen full of fluid, extremities, scrotum, etc., edematous to more than twice normal size. Had not attended to teeth. Blood pressure 210-110-100, pulse 52, full, regular. Heart—second aortic accentuated, borders enlarged, apex fifth interspace, five inches from mid-line; rales at base of lungs; marked difficulty in breathing or talk-

ing. On account of abdominal fluid could not lie down.

Before returning the second time, a local physician had given Tr. Digitalis, 30 drops, each morning for three weeks. In spite of digitalis medication patient grew worse. While under treatment in hospital all medication for heart was discontinued. The intake of fluids was limited to 600 c.c. during first three days, then increased to 1000 cc. daily. Diet consisted of fruits, green vegetables, small portions of beef, mutton, chicken, fish, bread and butter, plenty of sugar. A liberal diet was allowed as the blood chemistry showed nothing to contraindicate it.

Blood chemistry—sugar 115 mgs., chlorides 600 mgs., nonprotein nitrogen 34 mgs., CO₂ 46 vol. %. Red cells 4,100,000; white cells 9,400; hemoglobin 80%. Urine—12 hr. specimen, night, 180 c.c., sp. gr. 1020, albumin 0.25 gm., chlorides 0.25 gm., P-S-T 40%.

As the kidney function test was fairly good, the amount of albumin very small, I decided to try novasurol. The following table will show the daily output of urine, also loss of weight. From these daily results one can draw a comparison as to the relative value of the three drugs administered—novasurol, ealomel and bile salts.

Bile salts pills were given once a week until patient was discharged. October 17, patient still doing well.

Urine: Twenty-four-hour volume, 510 c.c., albumin 0.2 gm., Esbach, chloride 0.24 gm., P-S-T, 40%. As this test showed a fairly good kidney function with no great amount of albumin, decided to try novasurol. The following table will show the daily output of urine, also loss of weight. From these daily results one can draw a comparison as to the relative value of the three drugs administered.

Blood Chemistry

| Date | Chlorides | Sugar | Nonprotein nitrogen | CO ₂ |
|------|-----------|-------|---------------------|-----------------|
| 3/26 | 575 | 214 | 38 | |
| 8/20 | 600 | 115 | 34 | |
| 8/21 | 600 | 115 | 30 | |
| 8/26 | 555 | 100 | 30 | |
| 8/31 | 640 | 136 | 38 | |

Ascitic Fluid

| | | | | |
|------|-----|-----|---|--|
| 8/22 | 650 | 150 | 0 | |
|------|-----|-----|---|--|

Urine Chemistry

| Date | Vol. CC 24 hr | Day CC | Nite CC | Sp. gr. | Alb. Gm. Liter | Chlorides Gm. | P-S-T | Wt. | Remarks |
|------|------------------|--------|---------|---------|-------------------|------------------|-------|-----|---|
| 8/19 | | | 180 | 1020 | | 0.25 | 40 | | |
| 8/20 | | | | | | | | 262 | 11:30 A.M. 0.5 c.c. Novasurol in vein, slight increase in urine. |
| 8 21 | 1110 | 650 | 460 | 1012-15 | 0.25 | 5.6 -3.9 | | | |
| 8 22 | 380 | 320 | 60 | 1012-20 | HT | 2.24-0.24 | | | Urine decreased. Paracentesis 1 P.M.* 6 P.M. 1 c.c. Novasurol. |
| 8-23 | 2740 | 380 | 2360 | 1020-10 | HT | 2.1 -19.4 | | 244 | Urine and chlorides increased. |
| 8-24 | 1150 | 440 | 710 | 1014-15 | T | 3.2 -2.8 | | | Urine and chlorides increased. |
| 8/25 | 1160 | 410 | 750 | 1010-10 | N | 1.6 -3.0 | | 241 | 3 gr. calomel. |
| 8/26 | 1920 | 920 | 1000 | 1012-07 | N | 6.4 -4.8 | | 239 | Urine and chlorides increased. |
| 8 27 | 2180 | 1180 | 1000 | 1010-10 | N | 7.8 -2.3 | | 237 | Urine and chloride output continue good. |
| 8 28 | 1720 | 760 | 950 | 1010-10 | N | 6.0 -8.4 | | 235 | |
| 8/29 | 1360 | 780 | 580 | 1010-10 | N | 6.7 -5.3 | | 236 | 3 gr. calomel. |
| 8/30 | 1615 | 505 | 1110 | 1015-10 | N | 4.9 -9.1 | | 236 | 3 gr. calomel. Urine and chlorides increased. |
| 8 31 | 1240 | 330 | 910 | 1015-10 | N | 3.1 -6.0 | | 230 | |
| 9/1 | 1220 | 260 | 960 | 1018-10 | N | 2.4 -6.1 | | | Bowels did not move. urine and chlorides decreased: 3 bile salts pills. |
| 9 2 | 2130 | 810 | 1320 | 1012-10 | N | 7.0 -10.0 | 65 | | Note increase in urine and chlorides. |
| 9 17 | | | | | | | | | Patient discharged greatly improved. |

*Drew from abdomen 2000 c.c. fluid. Note ascitic fluid had no non-protein nitrogen; chlorides higher than blood plasma chlorides. Sp. gr. 1015.

COMMENTS

In any case presenting an abdomen full of fluid with serotum and extremities very edematous, paracentesis should be done before a diuretic is given. This is illustrated in this case; the first injection of novasurol did not have as good effect as the dose following paracentesis. The effects of calomel as a diuretic lasts longer than novasurol; pills of bile salts give better results than calomel or novasurol. No saline cathartics were given, no purging effects at any time.

In cases of this type, where the kidney function is good and the blood chemistry shows no chloride nor non-protein nitrogen retention, there is no indication for a diet with salt or meat restriction. When there is edema, or ascites, the volume of fluids allowed should always be restricted, and should always be measured—not estimated. Digitalis is not indicated in these cases unless there is a high plasma chloride, with a heart that is fibrillating.

Absolute rest in bed is the only way to build up a reserve force in the heart. Promiscuous medication, without a definite object in view and definite results is meddling therapeutics and should not be practiced.

A SIMPLE INSTRUMENT FOR INVERTED OR RETRACTED NIPPLES*

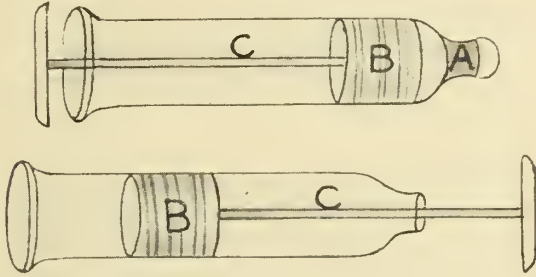
LEE BIVINGS, M. D.

Atlanta

Occasionally one sees a mother whose nipples are so badly inverted or retracted that it is difficult or impossible to nurse the baby at all. Having recently been confronted with such a condition in two successive instances I began thinking what I could do about it. I remembered an instrument described by Dr. Troy Bivings which he had made by cutting off the small end of a large test tube and applying the flanged end to the breast and creating suction through the open end with a rubber bulb from an Asepto Syringe; this worked very well, but I happened to have in my desk an empty 20cc. Antitoxin Syringe and I found by pulling out the rubber plunger, screwing out the handle, replacing the handle through the small end of the syringe and reversing the rubber piston screwing in the handle that I had a simple instrument that created all the suction necessary and just fitting over the nipple well enough to evert

*Assistant in Pediatrics, Emory University School of Medicine, Atlanta.

and extend it so the baby could get a good hold. By repeating the extension before every nursing I found that the nipple soon remained very well everted and extended. I am giving a diagram below showing the instrument.



Remove rubber stopper A, pull out rubber piston B and screw out the handle C, then reverse and replace piston B and screw in handle C from the small end of the syringe.

The instrument is simple and easily sterilized and kept clean in the home.

The area around the nipple is moistened with boric acid and the instrument applied and the nipple extended and everted, it is then withdrawn slowly and the child grasps the nipple before it recedes.

INTESTINAL OBSTRUCTION COMPLICATING PREGNANCY

B. T. BEASLEY, M.D.
Atlanta

Intestinal obstruction complicating pregnancy is very rare as is evidenced by the fact that the literature including the leading periodicals rarely ever contain a report. Jefferson reported a case in the *Lancet* in 1924. Bonny and Bridges reported one in *The British Medical Journal* in 1919. Evans reported a case of intestinal obstruction complicating ectopic pregnancy in the *Wisconsin Medical Journal* in 1910, and Hanley a similar case in the *Buffalo Medical Journal* in 1908.

The following is a case which came under the writer's observation in August of last year: Mrs. G. Age 32, admitted to the hospital August 6th. She was seen in the home the day before she entered the hospital. Extreme

nausea and vomiting was the predominating symptoms at the time. The history sheet contains the following related information. (a) Catamenia normal, (b) operation for gangrenous ruptured appendix three years previous, (c) married $2\frac{1}{2}$ years, one still born child, full term, following a period of nausea and vomiting, (d) nausea and vomiting began with her first knowledge of conception and remained with her daily. On June 16th while working in her store she was seized with sharp agonizing pains in her lower abdomen, the pain radiated upward, lasting several hours. Following this, nausea and vomiting grew progressively worse, and on July 17th she was given medicine to produce labor, but it failed to do so. Nausea and vomiting continued and five days before admittance to the hospital she was unable to retain water. Vomiting was green and had fecal odor to it. Her bowels had not moved for the past five days even after free use of calomel and castor oil and enemata.

Physical examination: Patient is a well developed obese white female, abdomen well rounded and symmetrically enlarged the size of a nine months pregnancy, a large linear scar in the region of the right rectus muscle, very uncomfortable, vomiting constantly, fecal character. Blood pressure 102-78, temperature normal, pulse 130, foetal heart sounds heard at the level of the umbilicus, two inches to right, 154 per minute. Patient continued to grow worse during the day. Enemata gave no relief, fecal vomiting increased and patient became semi-comatose. Gastric lavage. Normal saline 1000 cc subcutaneous was given every six hours. Quinine one drachm in water ounces four was given as retention enema which caused uterine contractions. Infundin minims three per hypo were given every thirty minutes for five doses. At seven o'clock P. M. patient was taken to the delivery room and three rubber catheters were inserted into the uterus. Fecal vomiting continued. Next day she expelled the catheters and labor pains progressed until the cervix was very well effaced. At eight o'clock P. M. she was returned to the delivery room and delivered by manual version, a still born girl baby. She was returned to her room and

(Continued on page 129)

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

MARCH, 1928

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Articles are accepted for publication on condition that they are contributed solely to this Journal.

Manuscripts should be typewritten, double-spaced, and the original (not the carbon copy) submitted. Used manuscript is not returned unless requested.

Communications and items of general interest to the profession are invited from all parts of the State. We especially invite county society secretaries to send us information of happenings in the county that would be of interest to the members throughout the State.

Reprints should be ordered within 30 days after the appearance of an article, since all type will be destroyed at the end of that time.

Editorial Department

PERIODIC HEALTH EXAMINATIONS*

Much has been said recently concerning the importance of the periodic health examination as a measure for safeguarding health and prolonging life. The majority of the medical profession, however, has not considered the matter seriously.

One of the primary objects of such an examination is to detect evidence of incipient disease before it has produced any great amount of injury and when it is most amenable to therapeutic measures. It is less important to discover some incurable condition in the patient than to detect such diseases as syphilis, tuberculosis, diabetes, or chronic nephritis. The acute diseases will make themselves known, but the diseases of insidious onset may develop to a dispiriting stage before they are brought to light.

At no age is an individual too young or too old to derive real benefit from the health examination when it is thoroughly conducted. The recognition of the importance of the periodic examination of the infant has re-

sulted in the establishment of numerous well baby clinics throughout the country. Is it not written that "a little child shall lead them?" The profession at large should profit by the successful example of the work done by the pediatricians. Intelligent advice and treatment after correct diagnosis must be based upon a full knowledge of the individual and his habits. Necessarily the bulk of this service will fall upon the general practitioner who in turn will refer the patient to the specialist when necessary.

In order to secure the favor of the public toward this phase of preventive medicine, it must be remembered that the fee for the examination should not be prohibitive. A fee of eight dollars for the history, physical examination, urinalysis, and Wassermann test should be satisfactory. At the subsequent visits of the patient he may be charged the same sum, although only a short interval history will be necessary. The frequency of the examinations can be determined by the physician according to the condition of the individual patient. Follow-up letters could be used to advantage in this connection.

Even more important than the question of fees in obtaining the support of the lay public is the attitude of the medical profession itself. It is evident that doctors have been very slow to interest themselves in this vital problem. There must be developed a hearty willingness on the part of all physicians to spread information concerning the value of these periodic health examinations. The American Medical Association has already passed resolutions favoring the sending of form letters by the county medical societies to their members and to the laity in reference to extending and promoting the value of this measure. It is imperative now that the medical societies, as units, and the members of the medical profession, as individuals, should endorse with active co-operation the establishment of the periodic examination as a requisite aid to the preservation of health.

An opportunity to sponsor one of the most far-reaching phases of preventative medicine lies before the physicians of today. Surely we shall not disregard it.

*This forceful and timely editorial was contributed by one of the younger members of the Association. The periodic health examination is coming. Get ready for it.—Ed.

STATE BOARD OF HEALTH

 ABSTRACTS FROM THE ANNUAL REPORT OF
 DR. T. F. ABERCROMBIE, COMMISSIONER OF HEALTH

If the same death rate had prevailed in Georgia in 1927 as did prevail in 1911, there would have been 15,000 more deaths than actually occurred. This means that 15,000 years of living were added to the lives of the people of Georgia. It also means that, at least, 5,000 working years were added to the lives of people in Georgia. No one can estimate what this means in actual economic gain. The population of the State has increased nearly one million since 1911, yet there were 15,000 fewer deaths.

Georgia's infant mortality rate was one point lower per thousand live births in 1927 than the 1925 birth rate for the United States Registration Area, the last available figures, and is four per cent less than any previous year of which we have a record in Georgia. The tuberculosis death rate was twenty per cent lower than the 1924 rate in Georgia; malaria was thirty-four per cent lower; typhoid fever nine per cent lower; dysentery forty and four-tenths per cent lower; pneumonia thirty-five per cent lower. The trend in most of the diseases that cause such an economic loss has been downward.

County health work has shown a decided increase in the addition of three full-time county health departments, making a total of twenty-seven counties at the close of the year. In 1917 only fifteen per cent of the total population of the States was under the protection of full-time health departments. In 1927 forty-three per cent received the protection of full-time health departments.

There were 29,317 cases of communicable diseases reported to the State Board of Health last year. This does not mean that all were reported, but enough reports were secured to show that the trend in practically all of the communicable diseases has been downward.

The toxin-antitoxin campaign for the immunization of pre-school children against diphtheria was carried out under the supervision of the Division of Child Hygiene, in

co-operation with the Parent-Teacher Association, and the Georgia Pediatric Society. They organized the clinics, and the State Board of Health furnished the toxin-antitoxin. A total of 149,280 doses were given to children throughout the state.

The Healthmobile visited twenty-three counties, and one hundred and seventeen communities. Three thousand six hundred and sixty-eight children under seven years of age were examined. Mothers' classes were held with 4,322 mothers present. Moving picture films on health subjects were shown to 17,230. The Healthmobile is a gift from the Phi Mu Sorority. The Sorority not only gave the Healthmobile, but also \$1,500 for operating expenses. This \$1,500 was matched with the Sheppard-Towner Funds.

The work of the Division of Sanitary Engineering consists of examination, approval and filing of plans and specifications for public works; furnishing plans and specifications for sanitation of homes and instructions; bacteriological examination and chemical analysis of water and sewage; investigation of nuisances, insanitary conditions and epidemics; surveys, estimates and supervision of mosquito eradication for malaria control for municipalities and communities, and regulation of impounded waters for malaria control.

Last year, 447 surveys were made of waterworks, sewerage systems, swimming pools, malaria and miscellaneous problems; 5,596 plans and specifications, bulletins, and leaflets were distributed on water, malaria, and the sanitary privy.

There are 250 public water supplies in the state, available to a total municipal population of approximately 953,296. Of this municipal population 72.5 per cent have certified water supplies. At the close of the year 1926, there were 61 public water supplies submitting no samples, whereas, at the close of the year 1927, sixteen of these supplies were on the list of those submitting samples. During the year 583 samples from domestic water supplies were examined in the laboratory. There were 7,190 bacteriological examinations made.

The laboratory of the State Board of Health made a total of 54,316 examinations of specimens last year—15,750 bacteriological exam-

inations; 31,376 Wassermann tests, and 7,190 water analyses. In 1917 there were 6,771 specimens examined as contrasted with the 54,316 examinations made in 1927.

The number of animal heads examined for rabies was 729. The infection from rabies was the lowest ever recorded in the history of this department, only 35.9 being positive. The number of treatments furnished was also smaller this year.

The laboratory distributed 348,135 c.e. (doses) of typhoid vaccine, an increase of 140,000 c.e. over the previous year; 49,342 c.e. diphtheria antitoxin and various other biologicals such as Schick material, smallpox vaccine, scarlet fever antitoxin and tetanus antitoxin.

The new State Tuberculosis Sanitarium was opened on March 15, 1927. Approximately 150 patients are now under treatment. The old institution is being renovated and made ready for receiving colored patients. Since the funds for the repair work were not available until the first of January, it could not be made ready earlier.

The Masons of Georgia have planned to build a fifty-bed childrens' hospital at Alto, which it is hoped will be completed during 1928. The legislature passed the necessary legislation accepting the gift, and pledging the state to maintain the hospital.

At the close of the past year, ninety patients were enrolled at the Georgia Training School for Mental Defectives. With the increased appropriation for 1928, plans are in progress, after certain repairs are made, to increase the population to 150. The Elks of Georgia are very much interested in the under-privileged children, and have bought playground equipment for the School, which was donated to the State with suitable ceremonies on January 29, 1928.

MASONIC DRIVE FOR CHILDREN'S COTTAGE AT ALTO

The State Board of Health is intensely interested in the drive now being put on by the Masons of Georgia for funds to build a cottage at Alto for children who have tuberculosis. Will you not on every occasion talk about tuberculosis in childhood and stress the need of a proper place to put these children.

Your help will be appreciated by the Masons and by your State Board of Health. Write something in your local paper about it, talk about it in all your contacts with the people.

THE NEW LABORATORY OF THE STATE BOARD OF HEALTH

We are very thankful to Governor Hardman who has arranged for the rebuilding of our laboratory. The reconstruction work which is already under way will require several months. The laboratory service will continue as usual during this time, but we will be greatly handicapped by the confusion. We hope that the health officers and physicians will keep this in mind and be lenient with us in the event of delays or errors during this time. The chief source of delayed service will be in the filling of orders and in correspondence. When the health officers meet next year in Atlanta we plan to give a house warming. We will then show you a laboratory to be proud of.—Georgia Health Officer's Bulletin, March, 1928.

THE RELATION OF THE PHYSICIAN TO THE HEALTH WORKER

At a recent meeting of representatives of state associations engaged in health education and prevention of diseases, the subject was discussed from all angles and at the close of the meeting it was the unanimous opinion that such discussions by the various interests is fundamental to progress and frequent meetings of this kind be encouraged for local and state groups.

The physicians' point of view was presented by the undersigned, supported by Drs. Mulherin, Bunce and Eaton.

(1) Social service has developed so rapidly in our state of late years as to reach the dignity of a profession. The growth of wealth has made the people sensible to their responsibility toward those less fortunate than themselves, and this has given impetus to all forms of sociological endeavor. New forms of charities are established and their activities often center around clinics for the healing of the sick.

College trained social workers are rapidly supplanting zealous amateurs, and it is necessary for them to make good and show results to their board of directors. The result of this activity is that the highways and byways are combed for patients to fill these clinics. Duplication of effort follows. Several societies compete for the honor of assisting the same unfortunate individual to obtain medical aid.

Physicians are the only class that can view this problem from a correct angle and in its various aspects. We are best situated to know the need for more clinics. Organized medicine feels that no free clinic should be established without first submitting plans and purposes to the county or state society for endorsement or rejection. Such plans should be comprehensive, showing the need of the proposed clinic, its location, the kind of people it intends to serve, the nature of the service rendered, an account of its methods of financing and a complete list of members of the medical staff and the officials of the institution that is fostering it.

Special committees of the county or state medical society should be appointed to consider matters of this kind and in case such a clinic is endorsed, the committee should serve the clinic in an advisory capacity.

(2) The medical profession through its organization is the one body to which the state should look for aid and guidance in all its health activities and the physician who is employed as a health officer for the county, city or municipality should receive the endorsement of the organized medical profession and the state should first demand this endorsement. The activities of its health officers should at all times reflect the composite view of the medical profession.

The health department of the state and the organized medical profession should make an earnest effort to come to a common understanding in all matters pertaining to public health. The medical profession needs this as a means of discharging its public obligation. The health department needs it if it is to keep its professional point of view clear and accomplish its great purpose. An annual conference between the health department and

some authorized body representing the organized medical profession is helpful. The results of this would be reflected down through their separate organizations to the county units. A health officer should be as anxious for the support of his local medical society as for the approval of the health department. The health department simply represents a means of applying the knowledge of the medical profession for the public good. If the relation of the physician to public health can be worked out along these lines where the activities of the health department can represent the composite views of the medical profession in matters pertaining to public health, it will be safe, sane, efficient and satisfactory.

Committee on Health and
Public Instruction.

PEOPLE ARE SEEKING HEALTH ADVICE AND MEDICAL GUIDANCE

In a recent address before the social workers of Michigan at Battle Creek, Dr. Donald B. Armstrong of the Metropolitan Life Insurance Company, stressed at length the point that people all over the country are seeking health advice and medical guidance.

Dr. Armstrong said, from his investigation of the situation by personal experience and studying the records of the many organizations doing social work, it is clear that the public wants protection against quackery and fraud. Many who write for advice suspect that the advertised cures are fakes, but do not know where to turn for safe and sound medical advice and treatment.

Many of our state and county daily and weekly papers carry repeatedly advertisements of cures for diabetes, cancer, tuberculosis, etc., and the people reading these advertisements have no way of knowing. They do not feel certain that they know the difference between a regular doctor and a so-called "doctor" of one of the many flourishing varieties of quackery.

Every county medical society should have a press committee, vested with the responsibility of issuing at least once a month articles containing information on hygiene, pre-

ventive and curative medicine, so as to educate the people, that they will not go wrong and get into blind alleys through lack of proper guidance. The people are so often fooled by quackery in the guise of medicine that they frequently lose faith in the medical profession as a whole.

Health agencies, women's associations, public school text-books, etc., are educating the people to see their family physician regularly once a year, preferably on the date of their birthday, to have a medical and health examination. These people being taught by outside sources want to know how healthy they are. They want advice as to how to live and how to prevent disease. Now, we doctors have been primarily trained to cure diseased conditions and we have heretofore not been very much interested in the well. Consequently an increasing number of people who are seeking health advice from physicians are going away disappointed because the majority of us are not yet prepared to give the kind of service that is wanted by the public. Many of us, instead of giving a thorough medical-health examination, for which most people are prepared to pay a reasonable fee are inclined to slap the patient on the back, and tell him he is O.K., and not to worry. That's "old stuff" and will not satisfy the people of today. Let's get busy and learn to give a thorough medical-health examination as outlined by the American Medical Association and let us stop being indifferent to what the people are clamoring for.

Committee on Health and
Public Instruction.

DR. DE SCHWEINITZ TO OPEN CALHOUN LECTURESHIP

The first address under the Abner Wellborn Calhoun lectureship of the Medical Association of Georgia will be given, May 9, by Dr. George E. de Schweinitz, Philadelphia, Past President of the American Medical Association, on "Headaches." The Calhoun lectureship has been established by the state association (The Journal, Oct. 1, 1926, p. 1156) to provide an annual lecture. Members are requested to contribute to the fund, which will be placed in a trust company to be held in

trust for the association, only the interest to be used each year. The visit of Dr. de Schweinitz, who was the unanimous choice of the committee, will be without expense to the association.—J. A. M. A., March 10, 1928.

HISTORY OF GEORGIA MEDICINE

MINUTES OF THE SUB-COMMITTEE MEETING

On January 30, 1928, a meeting of the sub-committee on the history of medicine in Georgia was held at the office of Dr. E. C. Thrash, chairman of the committee.

The following members were present:

Drs. F. K. Boland, A. H. Bunce, M. G. Campbell, and E. C. Thrash.

Drs. Bunce, Campbell, and Weaver were appointed to compile data from 1732 to 1825.

Dr. Boland was requested to name a committee to aid him in compiling it from 1825 to 1865.

Dr. Phinizy Calhoun was appointed to write the history of medical schools in Atlanta.

Dr. V. H. Bassett was made chairman of a committee, the members of which he is to name himself, to compile public health data.

Dr. Stewart Roberts was made chairman of a committee to write the history of medical education in Georgia.

Dr. M. A. Clark was made chairman of a committee, the members of which he is to select, to write the medical history of Macon.

Dr. J. P. Bowdoin was made chairman of a committee to write the history of Northwest Georgia.

Dr. W. E. McCurry of Hartwell was made chairman of a committee to write the history of Northeast Georgia.

Dr. W. A. Walker of Cairo was made chairman of a committee to write the history of Southeast Georgia.

Drs. W. A. Mulherin and S. J. Lewis of Augusta were assigned the duty to arrange for the writing of the history of medicine in Augusta and also the history of medical schools in Georgia, except Atlanta.

AURICULATOR NOT ACCEPTABLE

The Auriculator, designed and submitted for consideration by Dr. Maury M. Stapler of Macon, Ga., is stated to be a device for treating certain classes of deafmutism. According to the designer's description, the apparatus "consists of a metal tree, in the body of which is a thumb valve. One end of the tree terminates in four branches for the attaching of a like number of pieces of rubber tubing; the other tapers off stemlike for connection by means of an additional piece of rubber tubing to a negative air pressure pump."

This apparatus is a slightly different adaptation of a principle that has long been employed in the treatment of tubotympanic adhesive processes. There is no evidence to warrant the belief that greater success can be achieved with the Auriculator in treating such conditions than can be achieved with similar existing devices of the same general nature.

Dr. Stapler, in his submitted discussion of the causes of deafmutism, claims that a great many cases of deafmutism are due to "lymphoid tissue in the post-nasal space or to tonsils and adenoids blocking the lower ends of the eustachian tubes." It is the opinion of expert otologists, however, that even the most profound obstruction to sound conduction, such as that in which the stapes becomes fixed in the oval window by adhesive bands, can produce only a modicum of deafness.

The Council on Physical Therapy declares the Auriculator inadmissible for inclusion in the list of devices for physical therapy which are acceptable (1) because no scientific evidence has been presented to warrant the claim that it can be used successfully in treating deafmutism, and (2) because the descriptive material submitted with the device contains unscientific and incorrect statements as to the causes of deafmutism.—Report of Council on Physical Therapy, J. A. M. A., March 10, 1928.

FRACTURE OF XIPHOID PROCESS CAUSING COLONIC SPASM OF DIAPHRAGM

Clarence E. Bird, Boston (Journal A. M. A., July 9, 1927), reports a case of duodenal

ulcer in which a postero gastro-enterostomy (Billroth II) was performed. The patient was discharged on the nineteenth day after operation, without complaints. The wound was noted to be solidly healed. Two years later a moderately large hernia of the wound was found, and in the upper portion of it was felt an indurated mass thought to be a deep stitch surrounded by fibrous tissue. The patient was advised to enter the hospital for repair of the hernia. This he failed to do, and was next seen three years later. Because of new symptoms which had arisen, he was now quite willing to undergo a second operation. For two years, at intervals of from two weeks to a month, he had had attacks of sharp pain, starting in the midline between the xiphoid process and the umbilicus, and "shooting" to right and left along the costal margins toward the flanks. Each attack lasted over a period of from fifteen to thirty minutes. During this time he would lie down and compress his abdomen with his hands, partially relieving the distress. So far as he could tell, the attacks had no relation to his meals or to any other event, coming on at any time of the day but never waking him up at night. Two weeks before admission the pain became more persistent, and for the first time was accompanied by a "shaking" of the abdomen. This "shaking" he involuntarily demonstrated from time to time. There were several large and small defects in the linea alba between the umbilicus and xiphoid process through which the abdominal contents protruded on straining or coughing. In the upper portion of the wide scar could be felt a nodule which was the shape of the xiphoid, and which moved inward and upward as if hinged on the sternum. Manipulation of the wound in general would often bring on the colic spasm. But still more striking was the almost unfailing production of the contraction by pushing the xiphoid inward and upward, by "pushing the button," so to speak. The fractured xiphoid process was removed and the hernia repaired. Since his discharge five months ago, he has no more than slight discomfort and does not have the spasm of the diaphragm.

Georgia Tuberculosis Association

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GEORGIA TUBERCULOSIS ASSOCIATION

EARLY DIAGNOSIS CAMPAIGN

Announcement was made of the campaign to stress the need of the early diagnosis of tuberculosis in the January number of the Journal. This campaign is being directed by the tuberculosis associations and is to be nation-wide in its scope. It is to have two main objectives: first, to impress upon the individual, the public, the importance of looking out for the disease and the necessity of taking precautions, through proper medical examinations, against it; second, to urge upon physicians the wisdom of suspecting tuberculosis and the prime value of eliminating it first in every case when there is a single symptom that suggests it as the disturbing factor.

While March has been designated as the time for the launching of the campaign, it will be a part of the educational work of the local and State Tuberculosis Associations throughout the year and continue to be an important feature of their work in the future. In line with this larger plan, the Medical Advisory Committee of the Georgia Tuberculosis Association has arranged with the Journal for a department to be devoted to the discussion of tuberculosis; and the present purpose of the Committee is to feature in this department a series of articles already prepared on the following subjects:

1. The private physician in the control of tuberculosis.
2. Sources of infection in tuberculosis.
3. Modes of infection in tuberculosis.
4. Resistance and immunity in tuberculosis.
5. History in the diagnosis of tuberculosis.
6. Physical examination in the diagnosis of tuberculosis.
7. X-ray in the diagnosis of tuberculosis.
8. The laboratory in the diagnosis of tuberculosis.
9. Tuberculin in the diagnosis of tuberculosis.

It will be observed that the above subjects have a close relation to the proposed campaign. The articles have been prepared with the greatest care and the committee feels that they are worthy of the attention of every physician in the State. They are offered as a contribution to the *Early Diagnosis Campaign*, and it is hoped that they will serve to bring nearer the day when it can be truly said that tuberculosis has been mastered.

The first article in the above list will be found below. The committee feels that too great stress could not be placed upon its importance, as the private physician is the key man in the tuberculosis campaign.

THE PRIVATE PHYSICIAN IN THE CONTROL OF TUBERCULOSIS

The private or family physician holds the

key to the solution of the tuberculosis problem. In nearly every case he has the first opportunity of making the diagnosis, and, consequently, the responsibility is his for the discovery of the disease in its early or curable stage. Dispensary physicians and specialists see very few incipient cases of tuberculosis.

But the early diagnosis of tuberculosis is considered by many private physicians a difficult undertaking, particularly if modern laboratory aids are not available. We feel, however, that the failure to recognize the disease is not due so much to the lack of laboratory facilities as to the failure to think of the disease at all. Without entering into any discussion of the value of inspection, palpation, percussion and auscultation of the chest in patients suspected of tuberculosis, we desire to emphasize that anyone having a persistent temperature and tachycardia for a period of ten days or more is a proper subject for the use of all diagnostic measures to establish the existence or the non-existence of tuberculosis. Tuberculosis should be the first thought, not the last.

And too great emphasis cannot be placed on the fact that the responsibility of the private physician does not end with the diagnosis. It becomes his duty to give mental comfort to the patient, to allay the morbid fear of his family and friends and to give such directions as are necessary to prevent the spread of the disease. A case of tuberculosis recognized and properly cared for in its incipency may prevent a moderately or far advanced case later on, and should prevent such a case from becoming the focus for other cases. In other words the patient and his family must be instructed in the hygiene of tuberculosis, which is nothing more nor less than the hygiene of correct living. It should be borne in mind that these instructed persons may become the center of a group of people who will profit by their knowledge and experience. And the results may be far reaching in another respect: the early discovery of tuberculosis and the proper care of the patient and instruction of his family is the only way to prevent a serious economic loss to the family and the community, extending frequently not only to the loss of the

fruits of the patient's labor, but the added burden of his support at community expense. Another important duty devolving upon the family physician exclusively is the prompt reporting of the case to the health department.

All these things can be done most easily by the family physician and should be done by him for he is the guiding spirit in medical matters in the community, large or small, in which he practices. He may not have the time to examine contacts, and cannot do all the educational work that is needed, but in many communities there are agencies organized for this very purpose and, by making full use of them and thus strengthening their work, he enters that larger sphere of preventive medicine which predicates the existence of the profession he loves so well.

The role of the private physician in the control of tuberculosis is paramount.

For tuberculosis we prescribe not medicine but a mode of life.—Bushnell.

The only rational means of treatment are those which are based on the natural recuperative powers of the body.—Keith.

INTESTINAL OBSTRUCTION COMPLICATING PREGNANCY

(Continued from page 121)

her bowels moved at nine o'clock P. M. Vomiting ceased immediately. She made normal progress and was sent home on the twelfth day after delivery.

Impression: Patient evidently had a loop of intestine, between uterus and band of adhesions at site of old incision, which was obstructed by pressure.

Note: Patient returned to the hospital on August 25, suffering with severe pains in epigastric region, vomiting constantly, temperature 103. Two days after readmittance she became extremely jaundiced. Van den Bergh reaction test was direct and immediate. On Sept. 10 she was operated. The hepatic flexure of the colon was adhered to the gall bladder. The gall bladder was gangrenous at the point of attachment, and contained one large mulberry gall stone and several small ones.

District and County Societies

DISTRICT OFFICERS

FIRST DISTRICT

President.....Lanier, L. F., Rocky Ford
1st Vice-Pres.....Myers, Wm. H., Savannah
2nd Vice-Pres.....Elarbee, G. W., Daisy
Sec'y-Treas.....Long, W. V., Savannah

SECOND DISTRICT

President.....Redfearn, J. A., Albany
Sec'y-Treas.....Watt, Chas. H., Thomasville

THIRD DISTRICT

President.....Stukes, J. T., Americus
Vice-Pres.....Daves, V. C. Vienna
Sec'y-Treas.....Greer, Chas. A., Oglethorpe

FOURTH DISTRICT

President.....Clark, W. H. LaGrange
Sec'y-Treas.....Callaway, Enoch, LaGrange

FIFTH DISTRICT

President.....Ansley, W. S., Decatur
Vice-Pres.....Barber, W. E., Atlanta
Sec'y-Treas.....Camp, R. T., Fairburn

SIXTH DISTRICT

President.....Miles, W. C., Griffin
Vice-Pres.....Miller, G. T., Macon
Sec'y-Treas.....Thompson, O. R., Macon

SEVENTH DISTRICT

President.....Wofford, W. E., Cartersville
Vice-Pres.....Harbin, R. M., Rome
Sec'y-Treas.....McCord, M. M., Rome

EIGHTH DISTRICT

President.....Johnson, J. E., Elberton
Vice-Pres.....Reynolds, H. I., Athens
Sec'y-Treas.....Carter, D. M., Madison

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Vice-Pres.....Revell, S. T. R., Louisville
Sec'y-Treas.....Ward, C. D., Augusta

ELEVENTH DISTRICT

President.....McMichael, J. R., Quitman
Vice-Pres.....Fleming, Albert, Folkston
Sec'y-Treas.....Reavis, W. F., Wayercross

TWELFTH DISTRICT

President.....New, J. E., Dexter
Vice-Pres.....Edmondson, J. W., Dublin
Sec'y-Treas.....Cheek, O. H., Dublin

1928 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 20, 1927.
2. Turner County, Dr. J. H. Baxter, Ashburn, November 15, 1927.
3. Terrell County, Dr. Logan Thomas, Dawson, December 1, 1927.
4. Pike County, Dr. M. M. Head, Zebulon, December 3, 1927.
5. Ben Hill County, Dr. L. S. Osborne, Fitzgerald, December 8, 1927.
6. Evans County, Dr. S. T. Ellis, Claxton, December 29, 1927.
7. Taylor County, Dr. J. C. Hind, Reynolds, January 3, 1928.
8. Jasper County, Dr. E. M. Lancaster, Shady Dale, January 6, 1928.
9. Talbot County, Dr. C. C. Carson, Talbotton, January 28, 1928.
10. Wayne County, Dr. M. N. Stow, Jesup, February 9, 1928.
11. Lamar County, Dr. Jno. M. Anderson, Barnesville, March 6, 1928.
12. Terrell County, Dr. Logan Thomas, Dawson, March 7, 1928.
13. Stephens County, Dr. C. L. Ayers, Toccoa, March 8, 1928.

NEW MEMBERS FOR 1928

Bel, R. F., Wayercross
Brown, M. S., Fort Valley
Campbell, J. A., Nahmita
Cate, G. V., Brunswick
Cochran, A. H., Atlanta
Copeland, H. J., Griffin
Crowder, M. S., Griffin
Garrett, J. A., Meigs
Goldin, Ivy T., Cedartown
Golson, W. R., Macon
Hainline, S. E., Macon
Haslem, J. E., Fort Valley
Hollingsworth, P. L., Wayercross
Johnson, R. F., Columbus
Keiser, Jno. M., Macon
Lane, B. H., Wayercross
McBryde, T. E., Rockmart
McClain, M. C., Tate
McMillan, Thos. J., Milan
Meeks, J. A., Kite
Parker, Will, Ashland
Parramore, W. V., Cochran
Smisson, R. C., Fort Valley
Smith, E. L., Eastman
Standifer, W. B., Metcalf
Watkins, W. B., Metcalf
Williams, D. B., Aragon
Williams, J. F., Thomasville
Wilson, J. R., Homerville
Wood, J. B., Griffin

SEMI-ANNUAL MEETING SECOND DISTRICT MEDICAL SOCIETY

ALBANY, GA., OCTOBER 14, 1927

Meeting called to order by Dr. J. A. Redfern, President.

Invocation. Dr. Harry Cobey.

Address of Welcome. C. Q. Wright, City Manager.

The response in behalf of the visiting members was delivered by Dr. W. W. Jarrell of Thomasville.

SCIENTIFIC PROGRAM

1. The first paper on the program was entitled "Kidney Function" and was delivered by Dr. W. W. Jarrell. Dr. Jarrell spoke without manuscript and spoke chiefly of the various renal function tests also discussing kidney reserve. He stated that he used the phenolsulphonephthalein test but did not rely upon this alone as he felt much importance should be attached to the ability of the kidney to change the specific gravity of the urine depending upon the diet.

Discussion. Dr. Mulherin of Augusta, President of the State Association, complimented Dr. Jarrell upon his clear presentation of the subject and stating that we must not lose sight of the physiology.

Dr. Seale Harris of Birmingham stated that a college professor could not have presented the subject more clearly and simply than Dr. Jarrell had done. He mentioned the work of Allen as of importance in this connection. Experiments on animals show that it is necessary to remove about nine-tenths of the kidney before the reserve is greatly taxed. The presence of albumen in the urine is no indication of the extent of the disease.

The Secretary being late in arriving the minutes of the last meeting were read at this time. Which were approved as read.

2. Dr. Allen H. Bunce of Atlanta, presented "The Story of Richard Bright after One Hundred Years." In his talk Dr. Bunce showed a photograph of Dr. Bright. He also read interesting excerpts from Guy's Hospital Reports, the hospital in which Bright worked 20 years, six hours each day for \$200.00 a year. The report contained the first report of 100 cases of Bright's Disease. The records were most complete. Dr. Bunce also presented the original copy of the London Lancet giving an account of Bright's death. There was an autopsy at which every organ was examined. He died at the age of 70 due to arterio-sclerosis.

3. Doctor Seale Harris of Birmingham, thanked the society for inviting him. Doctor Harris' talk was confined to the Minot-Mur-

phy diet in pernicious anaemia. He expressed the opinion that this diet is equal to the discovery of Insulin. He reported ninety cases of pernicious anaemia on liver diet, forty-five per cent apparently well after three or four years. Blood count increased from one million four hundred thousand to normal in one case. It is very essential to continue this liver diet. He reported a case of pernicious anaemia under observation for six years, blood count was 900,000, under liver diet is now normal. Reduced liver, blood went down to 4,000,000; increased liver and it went back up. Liver from any source seems efficient. Cooking does not destroy the effect and it may be cooked in any form. It is unnecessary to give it raw but a well balanced diet should go along with it. Some believe a liver extract will be found which will take the place of liver as a whole. Dr. Harris expressed the belief that hepatitis will be found responsible for pernicious anaemia.

The paper was discussed by Doctor E. F. Wahl, Doctor Mulherin and Doctor Bunce, the latter showing a case of pernicious anaemia apparently cured.

Following committees were named:

Committee on resolutions of the death of Doctor Jenkins—

Doctor C. H. Watt,

Doctor C. K. Sharp,

Doctor W. L. Davis.

Committee on Invitation—

Doctor W. B. Smith,

Doctor Gordon Chason,

Doctor C. W. Twitty.

Morning session then adjourned for luncheon at Radium Springs.

4. Doctor Wilkinson reported his results with acriflavine after having used it per rectum in fifteen infants suffering from diarrhoea. He proclaimed this to be a most useful drug in selected cases when administered by the physician himself.

This paper was discussed by Doctor Mulherin, who stated that he had never used this drug but expected to try it out. He emphasized the importance of distinguishing between the infectious and non-infectious diarrhoeas.

5. Doctor F. K. Neill of Albany, read a paper on Goiter which showed that the writer was thoroughly familiar with his subject and his discussion was appreciated and enjoyed.

This paper was discussed by Doctor Bunce, Doctor Harris and Doctor E. F. Wahl.

COMMITTEE REPORT

Meeting place. Bainbridge, Ga.

Papers to be read by the following men:

Surgery. Doctor Parry.

Medicine. Doctor Hays, Colquitt, Ga.

Pediatrics. Doctor Lucas, Albany, Ga.

E. E. N. & T. Doctor Moore, Thomasville, Ga.

Report of committee was favorably accepted in full.

Meeting adjourned.

CHAS. H. WATT, M.D.,
Secretary.

RANDOLPH COUNTY MEDICAL SOCIETY HOLDS ANNUAL CLINIC

February has come, in the past two years, to be regarded as an outstanding month of scientific interest in Randolph County. Through the courtesy of the Randolph County Medical Society it has been made the month that annually assembles in Cuthbert the leading medical men of this section for a day of fraternal assembly, of scientific study of unusual case problems that confront the individual doctors, and of splendid clinical discussion of these problems, led by outstanding specialists of the State College of Medicine.

It was the pleasure and privilege of the Randolph County Society again this year to have as their guests on Thursday, February 2d, Doctors W. A. Mulherin, Pediatrics; H. M. Michel, Orthopedies; V. P. Sydenstricker, General Medicine, and Paul Eaton, Public Health, all of the State College of Medicine, for the third annual Clinic sponsored by this Society and held at Patterson's Hospital in Cuthbert. The day was a success in every particular. The attendance was large, the Randolph County Society being present in full, and visiting doctors from Sumpter, Terrell, Early, Calhoun, Stewart, Quitman, and Clay Counties coming in for the day.

The Clinic opened at 9:30 A.M. and the visiting specialists were busy until nearly six o'clock in the afternoon. The cases presented were varied and interesting, and the discussions in which all the doctors joined were lively, keen and full of up-to-date scientific content.

A most interesting feature of the day was a meeting in the afternoon of the Cuthbert Parent-Teacher Association, to which all rural P.-T. A. members of Randolph County were invited and before which a large audience of mothers and teachers Doctors Mulherin and Eaton spoke. Dr. Eaton's paper went straight to the core of community responsibility for providing adequate public health machinery subject from the standpoint of steady, patient education of the citizens themselves, that a basis may be laid for substantial building along these lines, in order that not only the present generation may be benefited, but that a vision for the future may be realized. His address was a splendid plea for Parent-Teacher activity in behalf of every little child. He

was followed by Dr. Mulherin, who from the viewpoint of the pediatrician, gave the mothers present an earnest, practical, scientific outline of how to direct the growth and development of her own child. Mothers and teachers joined in the discussion afterwards, and the educational value of this meeting for Randolph County can not be too strongly emphasized.

The social feature of the day was a delicious luncheon of Capon and other choice dishes served at Patterson's Hospital by Superintendent Effie Davis and her fine corps of student nurses. All registered nurses in Randolph County, many of them graduates of this hospital, were present and assisted in the Clinic as well as in serving the luncheon. No detail was lacking, either in hospitality of the doctors, the graciousness of the nurses, or the tempting cuisine of the delightful meal, to make the day one long to be remembered, and its pleasures complete.

To Doctors Mulherin, Michel, Sydenstricker and Eaton, the County Society is indebted for what they brought of scientific helpfulness; and to the alumni of the State College who made their visit here possible, Randolph County people owe a debt of appreciation.

G. Y. MOORE, *Secretary*,
Randolph Co. Med. Soc.

COUNTIES REPORTING FOR 1928

HANCOCK COUNTY MEDICAL SOCIETY

Hancock County Medical Society announces the following officers for 1928:

President—H. L. Earl, Sparta.

Secretary-Treasurer—C. S. Jernigan, Sparta.

TERRELL COUNTY MEDICAL SOCIETY

Terrell County Medical Society announces the following officers for 1928:

President—W. H. Powell, Lumber City.

Vice President—T. D. Russell, McRae.

Secretary-Treasurer—C. J. Maloy, Helena.

Delegate—Frank Mann, McRae.

TALBOT COUNTY MEDICAL SOCIETY

Talbot County Medical Society announces the following officers for 1928:

President—J. E. Peeler, Woodland.

Vice-President—W. P. Leonard, Talbotton.

Secretary-Treasurer—C. C. Carson, Talbotton.

Delegate—G. L. Carter, Talbotton.

WARREN COUNTY MEDICAL SOCIETY

Warren County Medical Society announces the following officers for 1928:

President—A. W. Davis, Warrenton.

Vice-President—F. L. Ware, Warrenton.

Secretary-Treasurer—R. C. McGohee, Warrenton.

WORTH COUNTY MEDICAL SOCIETY

Worth County Medical Society announces the following officers for 1928:

President—J. L. Tracy, Sylvester.
Vice-President—H. S. McCoy, Doerun.
Secretary-Treasurer—W. C. Tipton, Sylvester.
Delegate—H. S. McCoy, Doerun.

WAYNE COUNTY MEDICAL SOCIETY—100%
Wayne County Medical Society announces the following officers for 1928:

President—J. Lawton Tyre, Screven.
Vice President—I. K. Ogden, Odum.
Secretary-Treasurer—M. N. Stow, Jesup.

TERRELL COUNTY MEDICAL SOCIETY
Terrell County Medical Society announces the following officers for 1928:

President—S. P. Kenyon, Dawson.
Vice-President—J. R. Cranford, Sasser.
Secretary-Treasurer—Logan L. Thomas, Dawson.

Delegate—S. P. Kenyon, Dawson.
Censor—Lucius Lamar, Dawson.

CHATHAM COUNTY MEDICAL SOCIETY
Chatham County Medical Society announces the following officers for 1928:

President—G. H. Lang, Savannah.
Vice-President—H. T. Exley, Savannah.
Secretary-Treasurer—A. A. Morrison, Savannah.

Delegates—M. J. Egan & C. F. Holton.
Board of Censors—Wm. R. Dancy, R. V. Martin and Chas. Usher.

OCMULGEE MEDICAL SOCIETY
Ocmulgee Medical Society announces the following officers for 1928:

President—E. C. Brown, Hawkinsville.
Vice President—E. L. Smith, Eastman.
Secretary-Treasurer—A. R. Bush, Hawkinsville.
Delegate—A. R. Bush, Hawkinsville.

JOHNSON COUNTY MEDICAL SOCIETY
Johnson County Medical Society announces the following officers for 1928:

President—H. B. Bray, Wrightsville.

Vice-President—T. L. Harris, Wrightsville.
Secretary-Treasurer—J. G. Brantley, Wrightsville.

Delegate—J. G. Brantley, Wrightsville.
SPALDING COUNTY MEDICAL SOCIETY
Spalding County Medical Society announces the following officers for 1928:

President—T. I. Hawkins, Griffin.
Vice-President—C. F. Griffith, Griffin.
Secretary-Treasurer—H. J. Copeland, Griffin.
Delegate—W. C. Miles, Griffin.

Censor—W. H. Steele, Griffin.
DOOLY COUNTY MEDICAL SOCIETY
Dooly County Medical Society announces the following officers for 1928:

President—H. H. Shipp, Vienna.
Vice-President—L. H. Bishop, Unadilla.
Secretary-Treasurer—F. E. Williams, Vienna.

BROOKS COUNTY MEDICAL SOCIETY
Brooks County Medical Society announces the following officers for 1928:

President—J. R. McMichael, Quitman.
Secretary-Treasurer—R. E. McClure, Quitman.
Delegate—J. R. McMichael.

HOUSTON-PEACH COUNTIES MEDICAL SOCIETY
Houston-Peach Counties Medical Society announces the following officers for 1928:

President—M. S. Brown, Fort Valley.
Vice-President—R. L. Cater, Perry.
Secretary-Treasurer—E. L. Evans, Perry.

MORGAN COUNTY MEDICAL SOCIETY
Morgan County Medical Society announces the following officers for 1928:

President—W. M. Fambrough, Bostwick.
Vice-President—W. C. McGeary, Madison.
Secretary-Treasurer—D. M. Carter, Madison.
Delegate—J. L. Porter, Rutledge.

Board of Censors—J. L. Porter, W. C. McGeary and D. M. Carter.
POLK COUNTY MEDICAL SOCIETY
Polk County Medical Society announces the following officers for 1928:

President—C. W. Peek, Cedartown.
Vice President—W. G. England, Cedartown.
Secretary-Treasurer—P. O. Chaudron, Cedartown.

Delegate—W. G. England, Cedartown.
Board of Censors—S. L. Whitely, I. T. Goldin and D. B. Williams.

THOMAS COUNTY MEDICAL SOCIETY
Thomas County Medical Society announces the following officers for 1928:

President—Mary J. Erickson, Thomasville.
Vice-President—Agnew Andrews, Thomasville.
Secretary-Treasurer—C. K. Wall, Thomasville.
Censors—C. H. Ferguson, J. N. Isler and R. A. Hill.

WALKER COUNTY MEDICAL SOCIETY
Walker County Medical Society announces the following officers for 1928:

President—M. W. Spearman, Chickamauga.
Vice-President—J. A. Shields, LaFayette.
Secretary-Treasurer—J. H. Hammond, LaFayette.

REGISTRATION

AT ANNUAL SESSION OF ASSOCIATION

Section 3 of the By-Laws of the Association read as follows: "Each member in attendance at the annual session shall enter his name on the registration book, indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of his society, he shall receive a badge which shall be evidence of his right to all the privileges of membership at that session. No member shall take part in any of the proceedings of an annual session until he has complied with the provisions of this section."

Georgia State Nurses' Association

OFFICERS

| | | | |
|-------------------------|----------------------------------|-------------------------|---------------------------------|
| President..... | Miss Annie Bess Feebeek, R.N. | | |
| | Grady Memorial Hospital, Atlanta | | |
| 1st Vice-President..... | Miss E. Alma Brown, R.N. | 2nd Vice-President..... | Miss Jessie Veazey, R.N. |
| | University Hospital, Augusta | | St. Andrews Apt., Atlanta |
| *Secretary..... | Mrs. Alma E. Albrecht, R.N. | Treasurer..... | Miss Jane Van De Vrede, R.N. |
| | Georgia Infirmary, Savannah | | 105 Forrest Ave., N.E., Atlanta |

WHAT THE GRADING COMMITTEE IS DOING!

The work of the Grading Committee, in its relation to compulsory registration of nurses in this and other states, and consequent effect on training schools, is of paramount interest to nurses and doctors, as well as to the public generally.

This Committee, following the report of the Rockefeller Study under the chairmanship of Dr. C. E. Winslow, brought together representatives of the different professions. It is a joint committee, representing the three large nursing organizations, the three great medical organizations and the American Public Health Association; together with one representative for hospital trustees and patients; four representatives from public education, and one member, Dr. Nathan B. Van Etten, to represent the general practitioner.

The Committee has adopted a five-year program and budget, and the matter of budget will be treated later on in this article. The program calls for frequent publications, to be made available to the allied professions.

In its preliminary work, the Committee invited ninety thousand doctors over the country to tell, first, how often they need the services of private duty nurses; second, whether they will co-operate with the committee by answering questions about their experiences with private duty nurses.

Over 20,000 replies had been received up to January first of this year, and the figures indicated that 98% of the surgeons so replying frequently require the services of private duty nurses; 94% of the obstetricians need such services, and so on down to doctors in the public health field, of who, only 9% stated they required the services of such nurses. Altogether, 84% of the doctors reporting indicate that they frequently need private duty nurses on their cases and have signified almost unanimously their cordial willingness to co-operate in the studies under way. Their response, says the Committee, is undoubtedly based on the need as related to their own pro-

fessional work. If local nurses and doctors will get together and thoughtfully analyze the problems peculiar to the different medical specialties, constructive experience which should lead to better understanding could be the result.

The committee has taken as its function the ways and means for insuring an ample supply of nursing service, of whatever type and quality is needed, for adequate care of the patient, at a price within his reach. The actual grading of schools is to rest upon a foundation of broad and careful study.

The Program

The program is divided into three main subjects. During the first and second years the committee made a study into the problems of supply and demand of nursing service, dealing with the problems of distribution, use of registries and questions of working conditions—such as hours, pay, seasonal employment, etc.

“In the third and fourth years attention will be concentrated upon the problems of ‘What are the essentials in running a training school? What is it that nurses must be prepared to do, and under what conditions will they actually get the training they are going to need?’ The committee believes that there is much in the existing system of nursing education that is of value. It believes that there should be no wholesale attempt to transform nursing schools into copies of other types of vocational schools, high schools or colleges. It believes that the nursing school is different from most other forms of vocational schools and that it should probably remain a distinct type. It even seems probable that nursing schools have something of real value to contribute to the general theory and philosophy of education. This does not mean that nursing schools are perfect! Probably many of them have a long way to go before they can even reach satisfactory standards. It does mean, however, that under all the faults there is something inherently fine in nursing education, which must be cherished. * * *

Basis of Comparison

“The actual grading of training schools

will continue throughout the five-year period, with the fifth year devoted almost entirely to this project. The committee feels that what is needed is not so much the scientific rating of each school, as it is the stimulating of all the schools to do increasingly better work, and to think with increasing interest and clearness about nursing education. Every school in the country is invited to join in a method of self-grading. The material gathered from questionnaires sent out to schools is being tabulated. Schools will be placed in order, from those which are making the very best record on each subject, down the line to those making the poorest. The rank each school receives will depend, not upon any judgment of the committee, but rather upon how the things that particular school is doing, compared with what the other schools in the country are actually doing with regard to the same problem. No public statement will be made as to the individual standing of any school. Any school that wishes to know how its practices compare with those of other schools, however, will be given a confidential report by the committee, with an explanation of why the question is important.

"Starting at the bottom the first year on a few points, the grading scheme has been something like a spiral cone in formation, the standards being raised annually. It is believed this spiral cone plan is the fairest, most 'painless' and effective method for raising the average standing of schools."

The financing of this splendid effort, then, is of vital importance, and what Georgia is contributing as related to other states is also of particular interest.

Up to February 1, 1928, a total of \$36,151.35 had been contributed from all sources, including a small contribution each from Hawaii and Alaska. This figure includes pledges. The actual cash received amounted to \$18,769.45. The states of New York, Pennsylvania and Massachusetts lead in contributions or pledges, with a total of \$13,844.20 up to January 1, 1928, of which amount New York State has to her credit \$6,866.00.

Georgia up to the same time had pledged \$623.00, of which the greater part has come through the District and Alumnae Associations of the G. S. N. A. It is hoped that before the Biennial Convention of the American Nurses' Association, in Louisville, in June of this year, subscriptions will at least equal one dollar for every member of the G. S. N. A., which would mean a minimum of \$800.00—a very nominal sum indeed for Georgia.

Biennial of the A. N. A.

Plans for the Biennial in Louisville, June 4-10, are going forward rapidly, and reserva-

tions should be made at once. The February issue of the American Journal of Nursing contained a list of the Louisville hotels. Additional information can be obtained from Miss Flora E. Keen, Thiernan Apt. C-1, 416 West Breckinridge St., Louisville. The exhibits will be specially interesting, space already having been purchased for 40 exhibitors. Information booths and nurses to greet convention comers, direct them to hotels, etc., will be on hand. The program will be given later.

Isabel Hampton Robb Memorial Fund Scholarship Announcement

Eight scholarships of \$250 each are offered for the year 1928-29 to candidates wishing to prepare for educational or administrative work in schools of nursing or in public health.

To be eligible for such scholarship, the applicant should be a high school graduate, a registered nurse, a member of the American Nurses' Association and she should have had one year of experience since graduation as an instructor or administrator. The scholarships are competitive, and all applications are filed until May 1, 1928, when each is to be written up under a number, the name of the applicant being withheld. Scholarships are not given for summer courses. For application blanks, apply to the Secretary of the Committee, Miss Katharine DeWitt, R. N., 19 West Main St., Rochester, N. Y.

Lifelong Dream Realized

The culmination of a lifelong dream of Mother Alphonsa Lathrop was the recent opening of the new Rosary Hill Home for incurable cancer patients, at Hawthorne, N. Y. Mrs. Rose Hawthorne Lathrop, who became a Dominican nun, was the daughter of Nathaniel Hawthorne. Thirty years ago she began her charitable work in a dilapidated tenement house on the East Side of New York. In 1901 Rosary Hill was secured. As the work grew and became known, subscriptions were made which made possible the new two and a half story fire-proof structure that will accommodate 100 patients. Mother Alphonsa died in 1926.

N. L. N. E. Reprints

"What Constitutes an Adequate Residence for a School of Nursing," and "Furnishing and Equipment of a Residence for a School of Nursing," both by Miss Alice Shepard Gilman, are reprints recently gotten out by the N. L. N. E., as published in the October and December issues of the *American Journal of Nursing*. The former is ten cents a copy and the latter fifteen cents.

Journal Index

Alumnae organizations cannot employ themselves better than by completing their files of

(Continued on page 137)

Woman's Auxiliary Medical Association of Georgia

OFFICERS

| | | | |
|----------------------|---------------------------------|--------------------------------|--------------------------------|
| President..... | Mrs. Paul Holliday, Athens | President-Elect..... | Mrs. C. C. Hinton, Macon |
| 1st Vice-Pres..... | Mrs. Marion T. Benson, Atlanta | 2d Vice-Pres..... | Mrs. Wm. R. Dancy, Savannah |
| 3d Vice-Pres..... | Mrs. H. L. Rudolph, Gainesville | Cor. Sec..... | Mrs. Guy O. Wheelchel, Athens |
| Rec. Sec..... | Mrs. J. A. Selden, Macon | Treasurer..... | Mrs. Steward D. Brown, Royston |
| Parliamentarian..... | | Mrs. James N. Brawner, Atlanta | |

Delegates to A. M. A.

| | | | |
|-------------------------|---------|---------------------------|--------|
| Mrs. C. W. Roberts..... | Atlanta | Mrs. H. M. Fullilove..... | Athens |
|-------------------------|---------|---------------------------|--------|

Delegates to S. M. A.

| | | | |
|--------------------------|-------------|---------------------------|---------|
| Mrs. T. L. Holcombe..... | Union Point | Mrs. Frank K. Boland..... | Atlanta |
|--------------------------|-------------|---------------------------|---------|

Alternates

| | | | |
|-----------------------|---------|--------------------------|---------|
| Mrs. Dan Y. Sage..... | Atlanta | Mrs. Chas. E. Waits..... | Atlanta |
|-----------------------|---------|--------------------------|---------|

DISTRICT MANAGERS

FIRST DISTRICT

| | |
|-------------------------|----------|
| Mrs. G. L. Groover..... | Savannah |
|-------------------------|----------|

SECOND DISTRICT

| | |
|--------------------------|--------|
| Mrs. J. R. Redfearn..... | Albany |
|--------------------------|--------|

THIRD DISTRICT

| | |
|----------------------|----------|
| Mrs. R. H. Pate..... | Unadilla |
|----------------------|----------|

FOURTH DISTRICT

| | |
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| Mrs. Enoch Callaway..... | LaGrange |
|--------------------------|----------|

FIFTH DISTRICT

| | |
|------------------------|---------|
| Mrs. E. C. Thrash..... | Atlanta |
|------------------------|---------|

SIXTH DISTRICT

| | |
|------------------------|-------|
| Mrs. W. E. Mobley..... | Macon |
|------------------------|-------|

SEVENTH DISTRICT

| | |
|-------------------------|-----------|
| Mrs. S. L. Whitely..... | Cedartown |
|-------------------------|-----------|

EIGHTH DISTRICT

| | |
|------------------------|----------|
| Mrs. D. V. Bailey..... | Elberton |
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NINTH DISTRICT

| | |
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| Mrs. Ralph Freeman..... | Hoschton |
|-------------------------|----------|

TENTH DISTRICT

| | |
|----------------------------|---------|
| Mrs. W. W. Battey, Sr..... | Augusta |
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ELEVENTH DISTRICT

| | |
|-------------------------|----------|
| Mrs. W. C. Hafford..... | Waycross |
|-------------------------|----------|

TWELFTH DISTRICT

| | |
|-----------------------|---------|
| Mrs. J. Cox Wall..... | Eastman |
|-----------------------|---------|

: YOU CAN'T WRITE, TELEGRAPH

The chief detriment in the working plan of the Medical Auxiliary is the fact that all of us take the organization as a part-time hobby. When we attend a meeting we become enthusiastic and our only thought is for a rush of work and a campaign for new members.

That spasm passes and the slightest pretext can swerve us into other channels; we even fail in that smallest service—that of answering letters promptly.

Not one of us is free from this carelessness.

We are not writing this with the hope of withering the gay, care-free and charming members who can make all sorts of beautiful excuses and seem to be forgiven. We are, however, hoping to have the serious consideration of each of our members. Can we not speed our answers to all communications regarding Auxiliary matters?

MRS. E. V. DEPEW, *Secretary*,
A. M. A. Auxiliary.

FULTON COUNTY

RESUME OF THE YEAR'S ACTIVITIES

The outstanding features of this year's activities are; first, the successful termination of the plans made for the Meeting of the Southern Medical Association at which the Auxiliary entertained 479 visiting doctors' wives.

Second, a complete revision of the Constitution and By-Laws, and the creation of new offices; namely, that of President-elect, Auditor and Parliamentarian.

Third, the Auxiliary has continued the work of helping to beautify the Academy of Medicine, the official home of our Medical Society, the uses of which is always and at all times graciously extended to the Auxiliary. Draperies, curtains and additional kitchen equipment were provided for the Convention of the Southern Medical Association and the results obtained were most gratifying.

Fourth, The grounds adjacent to the Academy of Medicine are also under the supervision of one of our able members and through her knowledge and understanding, we have cause to be very proud of the outlook.

Fifth, Fifty Card Tables have been pur-

elased for the use of the members, thereby eliminating the neecessity of the earrying of tables when bridge parties are given.

Sixth, We have applied for and have been granted a Charter and this gives to the Auxiliary all the rights and powers neecessary and proper for the earrying on of its business. A seal also was made.

Seventh, The Editing of a Year Book and Directory containing all of the information relative to the Auxiliary, as well as containing the names of the Officers of the National, State and Southern Medical Auxiliaries of which it is a constituent.

Eighth, The Manifestation of interest in the Health Magazine, *Hygeia*.

Ninth, the perfection of the plans for the work of the Trust Fund for Needy Medical Students. The sum of \$250 was loaned at 4% interest during the month of December, 1927, to a student in his senior year.

Tenth, The entertainment of visiting doctors and their wives by the serving of buffet suppers on two oecasions, during the Emory Clinic week and again during the Meeting of the Fifth Distriet Medical Society.

Eleventh, There has been held several benefit bridge parties which have helped us to pay for all of the current expenses and in addition have enabled us to make a few innovations and still have a reasonable bank balance.

Twelfth, and most important of all are the eemented friendships, the affection displayed among the members and the ever increasing harmony in the every day work of the Auxiliary.

—Yearbook, Fulton County Auxiliary.

ACTIVITIES OF BIBB COUNTY

The Woman's Auxiliary to Bibb County Medical Society is to be congratulated on its work this year. They have fitted up a nursery for convalescent children in the Macon Hospital; eurtains, sand, tables, toys, furniture and book shelves are among the furnishings. They have provided for supervised play. The girl and boy seouts are assisting in the work. This idea was eoneeived by Mrs. J. A. Selden who saw a similar nursery in the McAlpine Hotel at New York.

The Auxiliary recently had a benefit eard party to raise funds to assist a doctor's daughter to go in training as a nurse.

CLARKE COUNTY

February meeting of Clarke County Woman's Auxiliary was held at the home of Mrs. A. C. Holliday with thirteen members present.

Our president, Mrs. Dan DuPree, presided. Two new members were received, Mrs. E. D. Andrews and Mrs. Charles Brightwell, bringing our Auxiliary up to 100%.

Mrs. H. W. Birdsong and Mrs. H. M. Fulilove were elected delegates to the annual session to be held at Savannah, May 9, 10, 11.

Hygeia Committee reported six new subscriptions from physieians and two others. Mrs. B. B. Bagby read a list of rural schools in the order in which she believed Hygeia would be most appreciated and the Committee decided to place six months' subscriptions for each of these schools where the teacher would not pay for same.

Mrs. A. C. Holliday, a member of the Courtesy Committee, sent a basket of daffodils to Mrs. Guy Wheelchel.

Mrs. W. H. Cabaniss introduced Mrs. John Jenkins who spoke on the subject, "Words." Her talk was inspirational and contained a great deal more than just "Words."

After the meeting a buffet luncheon was served.

Respectfully,
MRS. PAUL HOLLIDAY, *Secretary*,
Athens.

Journal Index Nurses' Association

(Continued from page 135)

the American Journal of Nursing. If there are copies missing, perhaps other members of their group can supply them. Or Miss Katharine DeWitt may be able to proeure them. The 1927 index is now being published. The value of the Journal to the student nurse and to the alumnae is in proportion to the inadequacies of nursing literature in the libraries, and its place on the shelves of the hospital, alumnae rooms and student nursing quarters is a most important one.

"Well, Mrs. Johnsing," a colored physician announeed after taking her husband's temperature, "Ah has knocked de feber outen him."

"Sho' nuff?" was the excited reply. "Am he goin' to get well, den?"

"No'm," answered the doctor, "Dey's no hope fo' him, but you has de satisfaction ob knowin' dat he died eured."—The Campaign.

HOTEL DE SOTO

SAVANNAH

Headquarters Medical Association of Georgia, annual session,

MAY 9, 10, 11, 1928

COMMUNICATIONS

REPRESENTATION IN THE HOUSE OF DELEGATES OF
THE A. M. A.

Dr. Allen H. Bunce, Secretary,
Medical Association of Georgia,
Atlanta, Ga.

Dear Doctor Bunce:

Section 3, Article 5, of the Constitution of the American Medical Association reads:

Sec. 3.—The total voting membership of the House of Delegates shall not exceed 175. The medical departments of the Army and of the Navy, and the United States Public Health Service and the scientific sections shall each be entitled to one delegate, and the remainder shall be apportioned among the Constituent Associations in proportion to their actual active membership as hereinafter provided in the By-Laws. (Amended 1925.)

Section 3, Chapter 1, of the By-Laws of the American Medical Association reads:

Sec. 3. APPORTIONMENT OF DELEGATES—At the annual session of 1925, and every third year thereafter, the House of Delegates shall appoint a committee of five on reapportionment, of which the Speaker and the Secretary shall be members. The committee shall apportion the delegates among the constituent associations in accordance with Article 5, Section 3, of the Constitution, and in proportion to the membership of each constituent association as recorded in the office of the Secretary of the American Medical Association on April 1 of the year in which the apportionment is made. This apportionment shall take effect at the next succeeding annual session, and shall prevail until the next triennial apportionment, whether the membership of the constituent association shall increase or decrease. (Amended 1925.)

The last reapportionment of delegates was effected at the Seventy-Sixth Annual Session held at Atlantic City in 1925. Another reapportionment will, therefore, be made at the Seventy-Ninth Annual Session of the Association to be held in Minneapolis, June 11-15, 1928. As the reapportionment will be made on the basis of the membership in constituent associations *as that membership has been reported on April 1, 1928*, it is important that this office shall have complete reports of the membership of your association so that the names of all members may be duly recorded in this office before April 1, 1928.

This matter is brought to your attention now in order that you may remind the secretaries of your component county medical societies of the need of the fullest possible reports of membership in their respective organizations.

Delegates already elected or to be elected for service in the House of Delegates for the Seventy-Ninth Annual Session of the American Medical Association in June, 1928, will be in no way affected

by the reapportionment to be made in Minneapolis.

On January 1, 1928, the membership of the American Medical Association, which, of course, is the combined membership of its constituent state and territorial associations, was 94,238. It is sincerely hoped that this splendid membership will be maintained and even increased by the affiliation of desirable and eligible physicians and that the membership in your state will be maintained at a figure that will insure that there will be no reduction of representation in the House of Delegates.

Very truly yours,
OLIN WEST, M.D., *Secretary*,
American Medical Association.

Feb. 7, 1928

To the Editor:

You probably are advised about an amendment in the Senate by Senator Arthur R. Robinson of Indiana, which would permit doctors to deduct from their declaration of income all expenses incurred in attendance on medical meetings.

In my opinion this provision is entirely just and I am taking this opportunity to inform you that I am co-operating with Senator Robinson in an effort to have this amendment adopted and the bill passed.

My father and other members of my family were doctors and I feel very close to the profession. I have long felt that doctors render a service to their communities much more valuable than their financial returns would indicate and I am in favor of any legislation that would encourage members of the profession to attend medical meetings.

Trusting that we may be successful in this matter and that you will call on me anytime I may serve you, I am,

With kindest regards,
Sincerely yours,
WM. J. HARRIS,
Senator.

Washington, D. C., February 29, 1928.

TULAREMIA—CASE REPORT

To the Editor:

During the past few years there has been considerable interest in a plagnelike disease called Tularemia. Dr. Edward Francis of the U. S. Public Health Service, so impressed me by his lecture on this disease at a meeting of the Medical Association of Georgia in 1926 in Albany that I have borne in mind symptoms of Tularemia since. It is my desire to report a case to emphasize the importance of bearing this disease in mind, thus making way for a possible diagnosis.

REPORT: January 18th, F. G., white, called me out four miles to see his wife, age 32, who gave history of three chills at irregular intervals, the first on January 8, 1928. About January the first

she scratched the posterior surface of the distal phalanx of the third finger of her right hand on chicken wire. The finger inflamed a little but did not bother her particularly until the first chill, followed by high fever, excruciating pains in finger, right arm, right axilla, bones, joints and a girdle pain, causing a great deal of complaint. Her physician was consulted and he noted a little inflammation around wound and decided to give anti-streptococcic serum and left in a short time on his vacation. At the time I first saw her there was a distinct ulcer, $1 \times 1\frac{1}{2}$ cm, practically without discharge. P. M. temperature 101, patient complaining of severe pain as above described with marked tenderness in axilla, nausea, no appetite and very nervous. The symptoms were out of proportion to the pathology, so I began searching for a cause. Finally the question was asked whether or not she had dressed a rabbit recently and she stated that she had on Friday afternoon, January 6th—the first one she had ever dressed. The rabbit had a tick on it. Her heart, lungs and kidneys were negative, spleen palpable only on deep inspiration. Blood picture within normal range. Smears negative for malaria. A specimen mailed to Hygienic Laboratory, care Dr. E. Francis, Washington, D. C., was reported on Jan. 23d, to agglutinate *Bacterium Tularensis* in dilutions of 1:10 and 20 but not in higher dilutions. Dr. E. Francis wrote that a second specimen collected a week later would show a great rise in titra. A specimen collected January 30th agglutinated in dilutions up to 1:160, thus confirming a diagnosis, according to Dr. Francis, of Tularemia. The patient ran a continued fever for nearly three weeks, ranging the first week above 103, gradually returning to normal.

However she remains weak and nervous and will be several more weeks or months recovering. Had she had the misfortune to have had multiple glandular abscesses and other serious complications she might have taken a year for a full recovery. The treatment is symptomatic. Prevention is the one essential. This may be accomplished by physicians warning their patient of the presence of this disease and advising the use of rubber gloves when handling rabbits and thorough cooking to kill the organisms. Publicity in local newspapers will no doubt bring quick and satisfactory results.

Sincerely yours,

J. A. REDFEARN, M.D.,
Albany, Ga.

February 7, 1923.

NEWS ITEMS

Dr. T. I. Hawkins, Griffin, former Secretary-Treasurer of Spalding County Medical Society, was elected president at the recent annual election of officers. Dr. A. H. Frye, Griffin, was host to the members of the society at its last regular meeting held on February 21st.

Dr. Thomas J. Charlton, Savannah, was elected chief of staff of the Georgia Infirmary, Savannah, at a recent meeting of the Board of Directors. He succeeds Dr. Craig Barrow, chief surgeon of the Central of Georgia Railway Hospital. Dr. Barrow was chief of staff of the Infirmary for more than twenty years and gave up the work because his entire time is taken up at the new railway hospital.

Dr. W. H. Goodrich, Augusta, has just published a history of the Medical Department of the University of Georgia. The book is filled with interesting facts concerning men well known throughout Georgia beginning with the founder of the college, Dr. Milton Anthony, and its establishment in 1828, he follows the biography of the founder and others who contributed to the success of the institution with extracts from articles. The physicians who contributed so much to the college and included in the history are: Drs. Milton Anthony, Andrew Cunningham, Louis Alexander Dugas, Henry Fraser Campbell, Joseph Adams Eve, Paul F. Eve, Lewis D. Ford, Ignatius P. Garvin, Alexander Means, and Geo. M. Newton.

Dr. J. H. Latimer, Waycross, has been elected health officer for the city of Waycross.

The Richmond County Medical Society made up a program for its January meeting consisting of a symposium on focal infections, as follows: Focal Infections from the Standpoint of the Internist by Dr. J. H. Butler; Focal Infections from the Standpoint of the Surgeon by Dr. J. H. Sherman; Focal Infections from the Standpoint of the Oculist by Dr. W. R. Bedingfield; Focal Infections from the Standpoint of the Dentist by Dr. R. L. Henry; Focal Infections from the Standpoint of the Roentgenologist by Dr. L. P. Holmes.

Dr. and Mrs. G. W. Willis, Ocilla, entertained the members of the Ben Hill County Medical Society at an elegant dinner at their home on January 17. A number of physicians of adjoining counties were included among the invited guests.

Dr. Edson W. Glidden, Alto, Superintendent of the State Tuberculosis Sanatorium, was honor guest at the January monthly dinner meeting of the Atlanta Tuberculosis Association, Atlanta, and was elected an honorary member of the staff.

The Troup County Medical Society held its quarterly meeting in the Colonial Hotel at LaGrange on January 19th.

The Woman's Auxiliary to the Spalding County Medical Society was organized at the home of Mrs. A. H. Frye, Griffin, on January 17. Mrs. Kenneth S. Hunt was elected president; Mrs. A. H. Frye, vice-president, and Mrs. H. W. Copeland, secretary-treasurer.

A Conference on Rheumatic Diseases is to be held at Bath, England, on Thursday and Friday, May 10 and 11, 1928. Sir George Newman, Chief Medical Officer of the British Ministry of Health, has kindly consented to act as President of the Conference. There will be three sessions: (1) Social Aspects, presided over by Lord Dawson of Penn, Physician to H. M. King George, (2) Causation, presided over by Sir Humphrey Rollston, (Regius Professor of Physic, University of Cambridge), and (3) Treatment, presided over by Sir E. Parquhar Buzzard, (Regius Professor of Medicine, University of Oxford). The local Hon. Medical Secretary is Dr. Vincent Cones, 10, Circus, Bath, England.

The National Board of Medical Examiners announces the removal of its offices to rooms 608-612 N. E. Corner Fifteenth and Locust Streets, Philadelphia.

Dr. Montagne L. Boyd, 563 Capitol Avenue, S. W., Atlanta, announces change of office hours to 11 to 1 on Tuesday, Thursday and Saturday; 2 to 4 on Monday, Wednesday and Friday. All visits and consultation by appointment.

Dr. J. A. Combs announces the opening of offices in the Atlanta National Bank Building, Atlanta.

The 13th Annual Convention of the Catholic Hospital Association of the United States and Canada and the Second Annual Hospital Clinical Congress of North America will be held in the Cincinnati Music Hall, Cincinnati, Ohio, June 18th to 22d, inclusive, 1928. The Fourth Annual Convention of the International Guild of Nurses will be held at the same time, in the same building, at night meetings.

The King's Daughters' Hospital, Waycross, was practically destroyed by fire on January 27 while the institution was filled to capacity. The patients were moved safely to nearby homes.

Dr. H. L. Akridge, Brunswick, was elected president; Dr. J. H. Hammond, LaFayette, vice-president, and Dr. V. H. Bassett, Savannah, secretary of the County Health Officers Association at a meeting recently held in Atlanta.

Dr. Stewart R. Roberts and Dr. Cosby Swanson, Atlanta, were guests of the Clarke County Medical Society on February 3 and were the principal speakers at its meeting held in the Georgian Hotel, Athens.

Dr. and Mrs. W. E. Wofford, Cartersville, entertained the members of the Bartow County Medical Society on February 1st at their home on West Main Street.

Drs. E. C. Thrash, J. A. McGarity, R. T. Dorsey, O. O. Fanning and H. C. Sauls, Atlanta, read papers at the regular meeting of the Fulton County Medical Society on February 2. The program consisting of a symposium on influenza and pneumonia.

Drs. J. N. Carter and D. B. Edwards, Savannah, were elected to the board of managers of the Savannah Hospital on February 6th.

Dr. A. E. Thayer, former director of laboratories at St. Luke's Hospital, Cleveland, Ohio, has been engaged to conduct the work of the Macon Hospital laboratories.

Plans are being considered to raise funds and rebuild the King's Daughters' Hospital, Waycross, which was practically destroyed by fire recently.

The Twelfth District Medical Society held its semi-annual meeting at Vidalia on January 19th. Titles of papers read were as follows: Address by President Dr. W. A. Malherin, Augusta; Chronic Maladies of Childhood that are Apparently Undiagnosable by Dr. E. C. Thrash, Atlanta; Acute Appendicitis—The Diagnosis and a Few Don'ts by Dr. G. T. Alexander, Vidalia; Food as a Factor in Hypertension by Dr. J. W. Daniel, Savannah; Benefits of Smith's Pediatric Seminar to the General Practitioner by Dr. J. Cox Wall, Eastman; Basal Metabolism by Dr. Geo. F. Klugh, Atlanta; Blood Transfusion—What is the Status of Blood Transfusion by Dr. Warren A. Coleman, Eastman; Gonorrheal Arthritis by Dr. Theodore Toepel, Atlanta; Report of Cases by Dr. J. W. Edmondson, Dublin; Clinical Talk by Dr. Mark S. Dougherty, Atlanta; What a Full Time Health Organization means to the General Practitioner by J. E. New, Dexter.

Thomas County Medical Society held its regular monthly meeting on February 14th, at Meigs, in the Council hall. The Scientific program consisted of: Clinical Case by Dr. J. N. Isler, Meigs; Some Obstetrical Observations by Dr. C. J. Reilley, Thomasville; The Home Treatment of Tuberculosis by Dr. J. W. Wallace, Thomasville; two clinical cases by Dr. J. A. Garrett, Meigs. Luncheon was served by the Woman's Auxiliary, music

by Mrs. W. M. Tison, Mrs. Roy Young and Mr. Julian Boswell. The Society endorsed the movement to raise funds for an endowment to be known as the Abner Wellborn Calhoun Lectureship.

Drs. J. H. Hull and A. H. Dellinger, Rome, read papers before the Floyd County Medical Society on February 17.

Dr. Stuart H. Shippey announces the opening of an office at 1205 Medical Arts Building, Atlanta. Practice limited to Internal Medicine.

Dr. Thomas P. Goodwyn announces the removal of his office to 208 Medical Arts Building, Atlanta. Practice limited to bone and joint conditions.

An unusual opportunity to study the degenerative diseases of old age will be given by The New York Academy of Medicine, 2 East 103rd St., New York City, October 1st to 13th, by means of a program of lectures, clinics and courses in hospitals and teaching institutions. This is to be the first "Annual Graduate Fortnight" of the Academy, inaugurating a form of graduate medical education novel in this country. In October of each year a problem of medicine or surgery of outstanding importance and interest to practicing physicians will be selected. The topic for 1928 is described as "The Problem of Aging and Diseases of Old Age." Not only will the diseases and management of old age be discussed, but attention is to be directed toward the prevention of premature and postponing of normal aging. Diseases of the heart, and affections of blood vessels and kidneys will be studied under the guidance of men of national and international reputation.

THE LESLIE DANA MEDAL

The fourth award of the Leslie Dana Medal, presented annually through the Missouri Association for the Blind to the person selected from the nominations received by the National Society for the Prevention of Blindness, will take place during the 1928 meeting of the American Academy of Ophthalmology and Otolaryngology, in St. Louis, Missouri.

Nominations will be received by the National Society for the Prevention of Blindness, together

with detailed information prompting the nomination, until the 15th day of May, 1928. The medical profession and ophthalmological societies are invited to submit names of persons deemed worthy of this honor to the National Society, under the conditions set forth in the deed of gift, as follows:

a. Long meritorious service for the conservation of vision in the prevention and cure of diseases dangerous to eyesight.

b. Research and instructions in ophthalmology and allied subjects.

c. Social service for the control of eye diseases.

d. Special discoveries in the domain of general science or medicine of exceptional importance in conservation of vision.

The recipient of the first medal awarded (1925) was Dr. Edward Jackson of Denver. The second annual award (1926) was to the late Miss Louisa Lee Schuyler of New York City, and the third award (1927) was to Dr. Lucien Howe, until recently of Buffalo, now of Cambridge.

COUNCIL PASSED

The notable success of many pharmaceutical products which have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in "New and Non-official Remedies" recommends not only the plan itself, but the wisdom of the medical profession in selecting these reliable "Council Passed" remedies for daily use.

Among the medicinal chemicals now being widely used are such "Council Passed" products as Ephedrine Hydrochloride, Neocinchophen, Butyn, Metaphen, Butesin Picrate, Anesthesin, Chlorazene, Amidopyrine, Procaine and Neutral Acriflavine, all of which are described in the recent edition of "New and Non-official Remedies."

These remedies are the result of research and clinical study. They have been announced in our pages and are worthy of further investigation on the part of our readers.

BABE AND LOU COME HOME

Babe Ruth and Lou Gehrig, famous home run hitters officially laid their big sticks away with the closing of the World Series a few months ago. The fact that the baseball season is closed, however, means little, if anything, to these two good natured huskies who consistently send the little white sphere soaring over the heads of the enthusiastic bleacherites as easily as Robert Tyre Jones, Jr., holes an eight-foot putt.

When they recently visited Kansas City to play in a benefit baseball game for the benefit of Mercy Hospital of that city, they combined their efforts and socked out a homer that will be remembered by staff and patients of that hospital long after

the benefit game has been forgotten and the proceeds have been used up.

The game was sponsored by the Kansas City Journal Post whose efforts are to be praised as it was through them that this worthy cause was brought to the attention of Ruth and Gehrig. At the time of their visit they took the opportunity to present a model P-163 General Electric Refrigerator to the hospital. The occasion was a joyous one for all concerned.

Whether the kiddies realize it or not, they are going to benefit by this well chosen gift. What could be more appropriate than to present a General Electric Refrigerator to a Childrens Hospital where practically the entire success of the institution hinges on the care and proper feeding of the patients. Particular care must be taken where children are concerned, as milk is an important part of the diet and must be kept cold and fresh at all times.

Incidentally, Paramount and Pathe News camera men were on the job grinding away and the entire proceedings were transferred to celluloid.

Glueck and Company, Kansas City Distributors of General Electric Refrigerators, installed this machine and should feel well pleased that two famous celebrities such as Babe Ruth and Lou Gehrig selected their machine for this presentation. Advertisement of these machines appear in this issue of the Journal. Alexander-Seewald Co., Distributors, Atlanta.

BOOKS RECEIVED

Physical Diagnosis by Charles Phillips Emerson, A.B., M.D., Professor of Medicine, Indiana University School of Medicine; Author of Clinical Diagnosis. Contains 324 illustrations; 553 pages. Publishers: J. B. Lippincott Company, P. O. Box 1579, Philadelphia, Pennsylvania.

Physical Diagnosis by W. D. Rose, M.D., Associate Professor of Medicine in the University of Arkansas, Little Rock, Fifth Edition. Contains 819 pages with 310 illustrations and three color plates. Price, \$10.00. Publishers: The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis.

Baby's Health Day by Day, mother love and mother-care are the baby's priceless birthright. For these there is no real substitute, and without them no child can attain maximum health and beauty. But science and system make loving care intelligent and efficient. In this important task, mother and doctor are partners. Co-operate with your doctor, and diligently carry out his wise counsel, day by day, for the baby's best interest. Publishers: Professional Press, Incorporated, 17 North Wabash Avenue, Chicago.

Convalescence, Historical and Practical, by John Bryant, M.D. Under the title "Convalescence," the author presents a comprehensive and authori-

tative review of the subject, covering, to July, 1927, both the literature and the more important practical developments affecting the progress of modern convalescent care.

Carefully written, with more than 100 illustrations, and a satisfactory index, the book should prove instructive and useful.

This book is unique in that it is today the only bound volume in any known language which covers both the historical and the practical aspects of Convalescence; and Convalescent Care, adequate in method and scope, is admitted by all clear and responsible thinkers to be essential to the successful completion of any modern community health program. 300 pages, 104 illustrations, index. \$5.00 net. Published by The Sturgis Fund of the Burke Foundation, White Plains, New York, 1927.

Gynecology by Howard A. Kelly, A.B., M.D., LL.D. Contains 1043 pages, illustrated. Publishers: D. Appleton and Company, 35 West 32d St., New York City.

Principles of Medical Treatment by George Cheever Shattuck, M.D., A.M., Assistant Professor of Tropical Medicine, Harvard Medical School Junior Visiting Physician, Boston City Hospital, in Charge of the Service for Tropical Diseases. Formerly Assistant Visiting Physician, Massachusetts General Hospital, and Assistant in Clinical Medicine, Harvard Medical School. Sixth Edition Revised and Enlarged. Contains 256 pages. Publishers: Harvard University Press, Cambridge, Massachusetts.

OBITUARY

Dr. Charles Thomas Nolan, Marietta, died while attending the meeting of the American College of Surgeons at Tampa, Florida, on January 26, 1928. He was born September 20, 1869, at Bostwick, Georgia, attended high school at Rutledge and Emory College at Oxford and graduated from Emory University School of Medicine in 1892. Dr. Nolan began the practice of medicine at Marietta in 1893 and continuously worked for the betterment of his profession and conditions pertaining to it. He was one of the outstanding figures of the medical profession in Georgia and for many years secretary-treasurer of the State Board of Medical Examiners, and founder of the Nolan's Sanitarium at Marietta. Dr. Nolan was surgeon for the Nashville, Chattanooga & St. Louis Railroad, a member of the Cobb County Medical Society, Medical Association of Georgia and the American Medical Association. Surviving him are his widow, two sons, Thos. Nolan, Marietta; Burrell Nolan, Muskogee, Oklahoma; one daughter, Mrs. Thomas Turner, High Point, North Carolina. Funeral services were conducted by Rev. James Lawrence from the St. James Episcopal church at Marietta and interment in the church cemetery.

THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA

DEVOTED TO THE WELFARE OF THE MEDICAL PROFESSION OF GEORGIA
PUBLISHED MONTHLY under direction of the Council

Volume XVII

Atlanta, Ga., April, 1928

No. 4

SOME OBSERVATIONS ON PIGMENT METABOLISM IN THE NEW-BORN*

M. HINES ROBERTS, M.D.

Atlanta

For many years the study of jaundice occurring in new-born infants has occupied the attention of a great number of observers. Efforts to solve the meaning and cause of this strange phenomenon proceed unabated and undoubtedly some day the riddle will be answered, but today we are still vainly searching. True many valuable contributions have been made and numerous theories advanced as to etiology, none of which, however, fully and adequately explains the various phases of this process.

No attempt has been made to offer in this paper a study which might in any way assume the importance of a solution of the problem, but certain observations which seem to present new phases of a physiological process already most complex in its various ramifications, and which indirectly may throw some light on the physiology of certain structures of the central nervous system, are submitted.

The importance of clinical jaundice in the new-born per se has long ago lost its significance. It is recognized now simply as an expression, and one might add, a rather crude expression of a process much broader and more fundamental in its scope than that merely of tissue saturation. To Schiff and Faerber must be given credit for establishing the fact that the blood of all new-born infants contains an excess of bilirubin, and that consequently all such infants must be in a state of latent jaundice. Why certain of these proceed to tissue saturation and others do not is a phase of this problem still to be answered.

For the past four years certain features of this condition have been studied with much interest. Two years ago I reported observations on the spinal fluid of a series of new-born infants which revealed the constant presence of a pigment, bilirubin, and suggested the probable relationship of this substance to that present in the blood serum of these infants. It was the purpose of this study to examine more carefully the spinal fluid and blood serum as to the character and quantity of this pigment in order to establish definitely if any such relation does exist and what bearing one might have upon the other.

Since the beginning of these investigations four years ago approximately 700 spinal fluids have been examined and in every instance there has been present a pigment varying in intensity from that of a pale straw to a deep greenish-yellow color. In only the last seventy-four infants have detailed studies of the character and quantity of pigment present in both serum and spinal fluid been made, and it is with these cases only that this paper will deal.

The quantitative estimation of bile pigments in the blood serum is at best a rather crude and cumbersome procedure. Probably the most universally recognized and dependable methods are those of Van den Bergh and Neulengracht, the latter, known as the icterus index being much the simpler. It was thought that probably these methods might also be adapted with certain modifications to the study of the spinal fluid and in a measure such proved the case.

Since the amount of pigment in the spinal fluid is often minute, a quantitative chemical estimate seemed impractical if not impossible, and for this reason the more exact Van den Bergh quantitative reaction was finally discarded for the Neulengracht Method which, though probably more crude in its estimation,

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*From the Departments of Pediatrics and Obstetrics of Emory University School of Medicine, Atlanta.

has presented definite data for comparison. The qualitative Van den Bergh, however, was done on each serum and on many of the spinal fluids showing a sufficiently deep pigmentation to warrant such a test.

The icterus index of the blood serum as commonly determined consists simply in comparing the intensity of pigment present in the serum with varying dilution of potassium bichromate, which substance imparts essentially the same tint to a solution as does bilirubin. Arbitrarily the intensity of color obtained when 1 mg. of potassium bichromate is dissolved in 100 cc. of water has been designated as having an icterus index of one. With this concentration as a basis, varying dilutions up to .2 gm. in 100 cc. or the equivalent of an icterus index of 200 are prepared as standards with which the blood serum may be compared.

The normal human adult serum has been proved to possess an icterus index varying between four and six. It has been further established that an increase in bile pigment of the serum up to an icterus index of 15 may occur before there is any clinical evidence of jaundice. This phase of biliary concentration has been aptly termed a period of latent jaundice, tissue saturation not beginning to occur until the index of 15 has been passed. Such a phase seems to exist constantly in the new-born, but certainly not within these limits as will be shown later.

Since the concentration of pigment in the spinal fluid of the new-born is considerably below that of the serum it was naturally found necessary to prepare an entirely separate set of standards for the estimation of pigment in this fluid. Therefore with the same standard for the icterus index of one, solutions were made varying in concentration from that of an icterus index of .9 down to that of 0.1 which latter exhibited only the faintest yellow tint.

With the definite limitations of this method as one of precision in determining pigment concentration well in mind, but with the equal assurance that as a mode of comparison it had merit, the estimations on both serum and spinal fluid were made. Before giving the figures obtained certain difficulties and possibilities of error in the method should be recog-

nized. Hemolysis in the serum if marked made the comparison with the bichromate solutions impossible. If only slight, however, with practice one learns to eliminate the pink tint with the eye and get a fairly accurate estimation. Another serious handicap in the study of the serum lies in the fact that the greater the concentration of pigment beyond a certain point, the greater the difficulty in comparing with the standard solution. This difficulty can easily be appreciated when one finds that only with greatest care can a difference in index of twenty-five points be noted in the standards beyond the concentration of 100, though the standards below 100 can easily be distinguished one from the other even though the difference be only 10 or 5, and low down in the scale even one. For this reason certain discrepancies may occur in the higher readings which are probably accounted for on this basis.

No such difficulty was encountered in comparing the spinal fluid with the standards in the scale below 1, the least variation in pigment being easily determined.

A total of seventy-four new-born infants comprise the series on which this work is based. It so happens that the large majority of these infants were born of syphilitic mothers, since this study was carried out coincidentally with some observations on the spinal fluid and blood of these infants suspected of the syphilitic infection. As has been formerly shown, however, syphilis seems to play no important role in pigment metabolism of the fluids and tissues of the new-born. Furthermore due to the intensive prenatal treatment of the mothers these babies, for the most part, were clinically and serologically free of syphilis at birth. No attempt therefore will be made at this time to discuss the Wassermann reaction in this series or its influence, if such do exist, on the question in hand.

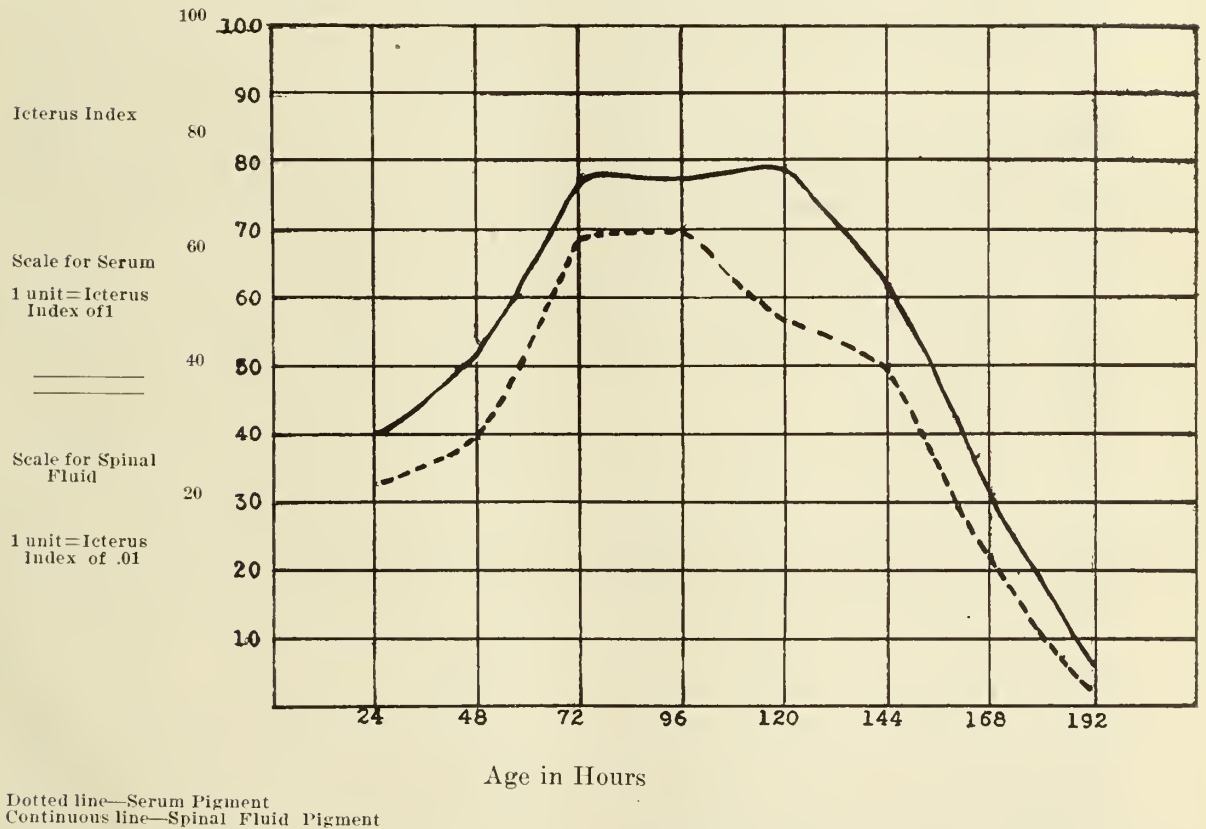
Icterus index readings have been made on the serum of 68 of the 74 infants studied. Since it is well known that the bilirubin concentration of the blood of new-born infants varies from day to day, no attempt to average the readings of the entire series has been made. The results are grouped according to the age of the infant at the time that the blood was drawn and from these averages

CHART I
THE ICTERUS INDEX ON BLOOD SERUM AND SPINAL FLUID
OF NEW-BORN INFANTS AT VARIOUS AGES

| | 24 hrs. | | 48 hrs. | | 72 hrs. | | 96 hrs. | | 120 hrs. | | 144 hrs. | | 168 hrs. | | 192 hrs. | | Fetus (4 mos.) |
|--------------------------------|------------------|------|------------------|------|------------------|------|------------------|------|------------------|------|------------------|------|------------------|------|----------------------|-----|------------------|
| | Avg. No. Ind. | | Avg. No. Ind. | | Avg. No. Ind. | | Avg. No. Ind. | | Avg. No. Ind. | | Avg. No. Ind. | | Avg. No. Ind. | | Avg. No. Ind. | | Avg. No. Ind. |
| Serum | 15 | 47.3 | 12 | 63.5 | 13 | 76.1 | 11 | 96.1 | 7 | 89.9 | 6 | 71.3 | 2 | 47.5 | 1 | 6. | 1 20. |
| Spinal fluid | 11 | .34 | 10 | .44 | 123 to 1 | | 14 | .76 | 6 | .58 | 5 | .56 | 2 | .30 | 1 | .1- | |
| Ratio of pigment concentration | 139 to 1 | | 144 to 1 | | | | 126 to 1 | | 155 to 1 | | 127 to 1 | | 158 to 1 | | Greater than 60 to 1 | | |

Spinal fluids showing hemorrhage not included

CHART II
THE ICTERUS INDEX ON BLOOD SERUM AND SPINAL FLUID
OF NEW-BORN INFANTS AT VARIOUS AGES



were obtained. Chart I shows clearly the gradual rise of the icterus index to its peak at the end of the 4th day, following which there is a gradual decline until normal is reached at the end of the 8th day. The curve in Chart II shows this in a graphic manner and also shows

the relation of the spinal fluid icterus index to that of the serum which will be discussed later. As shown in the chart the graphic representation of the varying concentration of pigment in the serum cannot be accepted as absolute, since the number of cases studied

on the 6th, 7th, and 8th days is so few. It is very likely that further examinations of the serums of infants of this age will cause the curve to flatten and descend much more gradually since clinical jaundice not infrequently persists beyond that age.

It will be noted that in each group save that for the 8th day, the icterus index is far above that for the normal adult, and indeed exceeds by many points the so-called threshold of clinical jaundice which has been placed by most observers at 15. It is to be regretted that the exact figures and dates for the appearance of clinical jaundice in this series can not be given. Icterus in the newborn negro is extremely difficult to detect and often one is in doubt as to its presence even in those cases showing a very high icterus index, consequently the daily progress notes of the inexperienced intern or student can not be relied upon for the true state of affairs. On one point, however, there can be no question, and that is that the threshold of clinical jaundice in the new-born must be far above that for the adult, for in no case was jaundice observed during the first twenty-four hours even though the average icterus index was above 47, and some of the individual cases ran considerably above this figure. Just what is the reason for this phenomenon is a point of much interest, and one upon which further studies are being made.

Included in this series is the study of the serum of a four months' fetus. It is interesting to note that the blood obtained from the longitudinal sinus gave an icterus index of twenty. This observation is significant in attempting to establish the etiology of icterus neonatorum, for from this, one is justified in the conclusion that the process, whatever it may be which leads to jaundice after birth, has already begun at this early age. Additional studies of the serum and if possible the spinal fluid of the fetus at various stages of development should prove illuminating.

Charts I and II show in a striking manner the relation of pigment concentration in the spinal fluid to that of the serum. It will be noted that the concentration in the fluid increases in approximately the same ratio as that of the serum until the peak is reached on the fourth day after which there is a grad-

ual fall to the normal level. The curves show this relation graphically, and though there are slight variations in the contour of the two curves certainly the general trend is identical, and very probably with a larger number of cases even these minor differences would disappear. In studying the relation of the curves it must be borne in mind that the actual relative values are not expressed by the graph, for whereas the serum icterus index is plotted to a scale in which one unit is equivalent to an icterus index of one, the spinal fluid index is plotted to a scale in which one unit is equivalent to .01 of an icterus index of one. The curves therefore serve to show only the relative trend of the pigment variations and in no way express their true relative values.

To obtain some idea of the actual quantitative ratio between the pigment in the serum and spinal fluid, the average icterus index obtained on the serum for each twenty-four hour period was divided by the figure representing the average icterus index on the spinal fluid for the same period. A study of these figures as shown in Chart I reveals that this ratio varies from 126 parts of pigment in the serum to one part in the spinal fluid, to 158 parts in the serum to one part in the spinal fluid, with an average of 139 to 1. Assuming the passage of pigment from blood serum to spinal fluid to be accomplished by means of osmosis, it would seem that the relative concentrations for each twenty-four hour period should be the same, and such is probably the case. The discrepancies shown in the figures of this series are probably due to the relatively crude quantitative estimation especially in the higher concentrations in the serum where, as before mentioned, matching with the standards is difficult.

In Chart III are grouped the cases in which the spinal fluid showed evidence of intracranial hemorrhage. The ratio of pigment concentration in the serum to that in the spinal fluid is in striking contrast to the ratio obtained in the normal serums and fluids. Whereas in the latter group an average ratio of 139 to 1 exists, we find in these cases an average ratio of twenty-nine to one, a relatively tremendous preponderance of pigment in the spinal fluid as compared to that in the serum. These figures show quite conclusively

CHART III

THE ICTERUS INDEX ON BLOOD SERUM AND SPINAL FLUID
OF NEW-BORN INFANTS SHOWING INTRACRANIAL HEMORRHAGE

| | Serum | Spinal Fluid | Ratio of Pigment Concentration |
|----------|-------|--------------|--------------------------------|
| Case I | 15 | .5 | 30 to 1 |
| Case II | 30 | .9 | 33 to 1 |
| Case III | 85 | 4.0 | 21 to 1 |
| Case IV | 200 | 6.0 | 33 to 1 |
| Case V | 40 | 1.5 | 27 to 1 |
| Average | 74 | 2.58 | 29 to 1 |

the pigment forming properties of the spinal fluid on the introduction of blood, and add another link in the chain of evidence in favor of extrahepatic bilirubin formation, for as will be discovered later these fluids give a positive indirect Van den Bergh reaction.

Prior to the studies made in the past four years on the spinal fluid of new-born infants it was felt that the presence of a fluid showing a xanthochromia indicated the existence of intracranial hemorrhage, however, since it has been shown that xanthochromia is a physiological process, which at times may be present to an intense degree, such an assumption seems without foundation. Every yellow spinal fluid does not denote intracranial hemorrhage, however, a study of the relative concentration of pigment in serum and spinal fluid seems to offer a fairly simple method of distinguishing the physiological xanthochromia from that due to local pigment formation resulting from intracranial hemorrhage. A careful study of figures representing the relative concentration of pigment in serum and spinal fluid of normal new-born infants as contrasted to those for infants suffering with intracranial hemorrhage seems to justify the following assertion: that an infant whose pigment concentration in blood serum is less than fifty times greater than that of the pigment concentration of the spinal fluid has probably suffered from intracranial hemorrhage. It is very likely that this figure might be placed even higher since no group of normal cases showed a serum pigment concentration less than 121 to 1 as compared with the spinal fluid.

The Van den Bergh reaction was done on practically all serums and many of the spinal fluids showing deep pigmentation. It is of in-

terest to note that all serums gave a positive indirect reaction with the one exception of the infant 8 days old whose icterus index was within normal limits for the adult. According to Van den Bergh and other observers such a reaction is indicative of a hemolytic type of bilirubinemia as contrasted to the obstructive type which gives the direct reaction. These findings would seem to refute the theory of the hepatogenous origin of icterus neonatorum.

Positive indirect Van den Bergh reactions were obtained only on those fluids showing very intense pigment concentration. The reaction here never assumed the deep purple color achieved when the test was done on the serums, however many of these fluids gave a definite lavender shade indicative of a faint positive reaction and consequently one is justified in assuming that the pigment present in the paler fluids must also be bilirubin although present in too weak a dilution to give a positive reaction.

A point of not unusual interest in this study arises when one reviews the literature concerning the presence of pigments in the spinal fluid. Local bile pigment formation is a well recognized process in the spinal fluid of the adult, however to quote Cushing in the Cameron Prize Lecture, "bile pigments do not normally pass the barrier of the choroid plexus, and are only found in the fluids in small traces in long-standing cases of deep jaundice and perhaps then only because of functional damage to the choroidal epithelium." Figures in this study show that infants whose serums have an icterus index as low as 15 possess a spinal fluid faintly though definitely pigmented. Such observations leave one to believe that some fundamental difference must

exist between the choroid plexus of the new-born as compared with that of the adult, if indeed the plexus be the gateway of entrance of pigment from serum to the spinal fluid.

SUMMARY

1. The spinal fluid and blood serum of seventy-four new-born negro infants has been studied for pigment content.

2. The Van den Bergh test for bilirubin gave a positive indirect reaction on all serums and many of the deeper spinal fluids.

3. The pigment content of the spinal fluid as measured by the icterus index varies directly with that of the blood serum and is approximately 140th as great in amount.

4. The concentration of pigment in both serum and spinal fluid shows a gradual rise to the 4th day following which is a gradual decline to normal by approximately the 8th day.

5. No infant showed clinical jaundice with an icterus index under 40.

6. Five cases of intracranial hemorrhage were studied. The pigment concentration in the serum was found to be only thirty times as great as that in the spinal fluid—a marked relative preponderance in the latter.

CONCLUSIONS

Both serum and spinal fluid of new-born infants contain protein-bound bilirubin as shown by the indirect Van den Bergh reaction, and hence the bilirubinemia is probably of the hemolytic type.

The normal pigment concentration ratio of serum to spinal fluid is greater than 100 to 1. A sero-spinal fluid ratio which is less than 50 to 1 indicates the presence of blood in the spinal fluid at some time.

The threshold of clinical jaundice in the new-born is higher than that for the adult, apparently well above an icterus index of forty.

DISCUSSION ON PAPER OF DR. ROBERTS

Dr. T. B. Gay, Atlanta: Dr. Roberts' paper though it may seem ultrascientific is of practical value. The fact that there is so much difference, as shown by his charts, between the concentration of pigment in the spinal fluid of normal cases and the concentration of the pigment in the spinal fluid in cases of intracranial hemorrhage is striking. His figures

force us to think about, even if we do not accept, the statement that a yellow spinal fluid does not mean intracranial hemorrhage. He has done some original work in doing the indirect Van den Bergh test on the spinal fluid. As far as I know, this has not been done before. A positive direct Van den Bergh test on the spinal fluid means obstructive jaundice and a positive indirect test means hemolytic jaundice. I think a most interesting feature is the comparison made of the concentration of pigment in the spinal fluid of normal children and the concentration of pigment in the cases of intracranial hemorrhage. Dr. Roberts may be working toward a standard which we can use very much like we do a blood count or any of our regular routine examinations. He is working in a field which has been unexplored but in a field which apparently has much which may be of interest to us.

Dr. E. C. Thrash, Atlanta: Dr. Roberts is certainly to be congratulated upon this extensive research work which he has done. He called me up two days ago and asked me to discuss this paper. I think he felt that a paper as highly technical as this would be a little bit shy on discussion and I suppose he knew that I was willing to tackle almost anything. I think I shy too in attempting to tackle a discussion of this most excellent thesis.

I mentioned this theory to Dr. Roberts once before and he did not fully agree with me, but he has not changed my mind completely that I am wrong and that is, that this jaundice is due to changes in the blood cells and in the tissue structures, especially the liver, after birth. Now this is the reason why there has to be very material changes for the hemopoietic activities to go on when the child is breathing air as compared to the hemopoietic activities which have to go while the child is being oxygenated through the mother's blood. I might compare the child receiving its oxygen through the mother's blood to the method by which the fish gets its oxygen. Naturally it would require a different hemopoietic process for the red cells to obtain oxygen first hand. The child oxygenates by the villi of the chorion floating in a lake of blood just as the fish oxygenates by the villi he collects floating in a lake of water. When the child is born it gets no more oxygen in this way. The cells have to receive their oxygen through the air. Certainly it would require a different type of hemopoietic system to take oxygen from the air than from the water. These cells are more or less useless and the force of the hemopoietic system has to work overtime to build up new blood cells which will function in the air because the cells that have been living pre-

vously have not been trained to function in the air. The liver cells have the same bearing. For all these active living processes in the fetus before it is born come from the mother's blood. After the fetus is born its own liver cells would have to undergo changes to react to its condition where no longer active liver principles are fed to the child. No doubt these liver cells will have to undergo changes to adopt themselves to the new environment. I think that jaundice in the newborn is a physiologic process and it is just the re-adaptation of the fetus to its new environment and the cells both in the liver and in the blood have to be discarded. That, of course, leaves this pigment in the blood that becomes deposited in the tissues. We do not know how much bilirubin pigment comes from broken-down blood cells. I simply offer this as a suggestion as an etiologic factor for pigmentation of the newborn.

Dr. W. W. Young, Atlanta: This paper like a great many other highly technical papers has a very practical application. I think there is nothing done in pure science which we cannot sooner or later apply in a practical way. There has been a great controversy in neurology as to the question of whether the choroid plexus is a secretory or simply a filtration organ. Fremont Smith in the March number of the Archives of Neurology and Psychiatry has mustered all the evidence on both sides and the preponderance seems in favor of the filtration theory. All the work done on the glucose value of the blood and spinal fluid has shown that there is a definite relationship in the average individual. This same thing is true of all products which are in solution in the blood. It rather bears out the fact that it is a mechanical process rather than a selective mechanism. The fact that the pigments which Dr. Roberts speaks of run rather parallel to the pigments in the blood would speak rather strongly for the active filtration theory. The question of whether it is a filtration process or a secretory process has a very definite bearing on the treatment of processes in the central nervous system. We know in the treatment of syphilitic disorders of the central nervous system that the question of the secretory activity of the choroid plexus has been a very important factor in neurosyphilis and it is true of all sorts of disorders of this type. We have attempted to increase the presumed secretory mechanism of the choroid plexus. It is true that diseases of the circulatory mechanism will change the permeability. It is also true that certain toxic processes increase the permeability and make the brain and spinal

cord more susceptible to these disorders. We think that this is an extremely important step in gathering the knowledge as to the actual functioning of the choroid plexus and as to the question of whether there are active changes in the plexus, etc., of the infant up to the adult stage.

Dr. Roberts is to be highly commended on this type of work. It is the type of work we should have done every day; that is going to get us forward in the practice of medicine; and that in this field has given us practical application in every day life.

Dr. Paul Eaton, Augusta: This paper is extremely interesting to me. I know nothing about the scientific end of it. It occurred to me that a little historical data might do some good. My grandfather was a physician and had his schooling ninety-seven years ago. In one of his text books on the diseases of children there is the suggestion that icterus neonatorum be treated by "a gentle puke of anti-monial wine."

Dr. M. Hines Roberts, Atlanta (closing the discussion): I want to thank the gentlemen who discussed my paper. I am sorry that I was not able to complete the presentation in the fifteen minutes allotted to me. There are a few additional points that I want to make. First, that the indirect Van den Bergh reaction, as Dr. Gay brought out, was positive on all sera and on a great many spinal fluids. The fluids that showed only a small amount of pigment did not give this reaction, probably because the concentration was not sufficiently great to show the color changes. These findings point rather strongly to a hemolytic type of jaundice than to an obstructive type.

I never talk to Dr. Thrash about jaundice in the newborn that he does not talk to me about the liver. I cannot believe there is a close relationship between jaundice in the newborn and the liver and the more I study this subject the less I feel that such does exist. Certainly the liver does not play the leading role.

Another point that Dr. Thrash brings out is that there is some important change that occurs at birth which causes the normal bilirubinemia to reach the point of tissue saturation. This is undoubtedly true; however the general process began long before birth. I have examined the blood of many babies during fetal life and find the bilirubin content much above normal.

Dr. Young's point was brought out in my paper, but I did not express it as well as he. That phase of the work has interested me exceedingly. It is the opinion of most writers

that the choroid plexus is impermeable to the bilirubin molecule, but here we find the newborn infant with an icterus index within normal limits for the adult possessing a spinal fluid distinctly pigmented to the naked eye. As I brought out in the paper, there must be a greater permeability of the choroid plexus in the newborn than in the adult, or else the type pigment molecule with which we are dealing is different and more readily passes the barrier.

The conclusions that I reached I want to repeat, namely, that the normal pigment ratio between the blood serum and the spinal fluid of the newborn is approximately 140 to 1. In cerebral hemorrhage cases I found the ratio approximately 30 to 1—with such a wide variation it should be easy to distinguish one type of xanthochromia from the other.

I want to thank Dr. Eaton for his discussion. I must say that so far as I have been able to determine no treatment is of any value in icterus neonatorum, so I might try this gentle puke.

METALS IN OUR FOOD

The metals commonly used in the manufacture of cooking utensils are iron, copper, tin, aluminum and nickel. Whether these dissolved metals in food produce chronic poisoning over a long period of exposure is the problem that was studied by F. B. Flinn and J. M. Inouye, New York (*Journal A. M. A.*, March 31, 1928). Copper, zinc, manganese, iron, aluminum, nickel and cobalt are commonly found in plant and sea food. Lead, a recognized body toxicant, is not. Copper, zinc, manganese, tin, iron and aluminum are generally present in the human body, but with the exception of iron do not have any known function in the vital economy of the organism. Copper, nickel, tin and aluminum are practically all eliminated in the stools; the excretion of zinc is divided equally between the urine and the stools. Metallic salts ingested with food combine with the proteins of the food and are rendered harmless except when the metallic salt is present in excessive amounts, or perhaps in cases of hyperacidity. All metallic salts ingested during the absence of food in the stomach have a deleterious effect. Copper, nickel, zinc, tin and aluminum are all attacked by acids or alkalis during the cooking process, the amount dissolved depending roughly on the acidity or alkalinity of the food. All foods having a metallic taste from these dissolved metals are unpalatable and irritate the gastro-intestinal tract.

PERFORATION OF THE RECTUM*

REPORT OF A CASE

A HELPFUL DIAGNOSTIC SIGN

CHARLES H. WATT, M.D., F.A.C.S.
Thomasville

Rupture, injuries and wounds of the rectum, while comparatively rare, are always serious. These may be spontaneous or the result of objects introduced into the rectum either purposely or through accident. Hellsstrom, in a review of the literature of spontaneous rupture, is convinced that, in most instances preceding the rupture, there was some pathological condition. He cites the case of a youth of seventeen, previously healthy, who experienced pain and bleeding at defecation, followed by rupture and diffuse peritonitis. Another case of a man, age sixty-three, was aroused in the night with unbearable pain in the rectum. Operation ten hours later revealed a rupture of the rectum without any history of injury. A case is reported by Heinke in which a healthy man of thirty, while lifting a heavy piece of iron experienced great pain and vomiting. At the hospital the rectum was found to be ruptured.

Foreign bodies may reach the rectum by one of two routes, (1) through the mouth, in which instance they must transverse the entire digestive tract, or (2) through the anus. Various objects, such as bones, hair balls, pins, nails, glass and what not, may be swallowed, pass through the gastro-intestinal canal to meet an impassible barrier at the anus. Similar objects may be introduced through the anus, though, as a rule, the objects entering the rectum via this route, if intentionally inserted, are larger and usually not sharp. Numerous illustrations are cited in the text books and need not be given here though it is interesting to note that the Kaffirs, working in the diamond mines of Africa frequently conceal diamonds by swallowing them or placing them in the rectum to be recovered later.

The symptoms arising from a rupture of

*Read before the Eleventh District Medical Society, Douglas, Ga., Jan. 12, 1926.

the rectum depend upon the site of the injury. Rupture occurring below the peritoneal reflection will result in perirectal infiltration and infection followed by abscess formation unless due care be taken and prompt treatment administered before this takes place. We have all seen cases of stricture low in the rectum followed by perirectal abscess and multiple fistula. These cases start as a stricture of the rectum followed by infiltration and infection of the rectal walls above the stricture and later the formation of perirectal abscess and fistula. Ruptures occurring above the peritoneal reflection are followed by signs of developing peritonitis, as in the cases of spontaneous rupture cited above.

The type of perforation, or rupture, of the rectum illustrated by the case I wish to report today is one every surgeon is likely to meet sooner or later but may not have more than one or two during his entire career. These are cases of extreme emergency and, as a rule, are rushed to the nearest hospital and surgeon. There is no time to argue the point as to who is the surgeon best qualified to handle this particular type of case, as one may do in thyroids, hernia or even in cases of acute appendicitis. Because of this fact no one surgeon can claim a large number of such cases coming under his personal observation. It is of little wonder then that our text books on general surgery and even those written by men who specialize on diseases of the rectum, such as Gant's 3-volume edition, contain very meagre description of the symptoms and signs arising from a rupture of the rectum. We invariably read that the patient, suffering from such an injury, presents at first the picture of shock and perhaps bleeding from the rectum followed by evidences of developing peritonitis, if the peritoneal cavity has been entered. Therefore it occurs to me that it is quite worth while to record any undescribed signs or symptoms manifesting themselves that might lead to an earlier diagnosis.

The symptoms I wish to call your attention to today evidently do not occur or manifest themselves in every case of rupture of the rectum in which the peritoneal cavity is entered, but when present will doubtless appear early before the usual signs of developing

peritonitis, as in my own case. But for these symptoms I could have no excuse for presenting this case before you today.

CASE REPORT

Master J. H. Age 7 years. White. Previously a normal, healthy boy. On the 13th of December, 1924, while playing in the yard with a piece of solid brass curtain rod, two feet long and one-quarter inch in diameter, rough at one end but with a rounded knob on the other, was attempting to force the rough end into the ground by sitting on the rounded end and raising his feet from the ground thus placing his entire weight on the rod. On the last attempt the rod suddenly passed through his trousers and entered the rectum through the anus. He screamed with pain, pulled out the rod himself and ran in the house. His mother stated that he vomited, became very pale and broke out in a profuse perspiration. A small amount of blood passed from the rectum, just enough to stain his clothes. This occurred about one-thirty p.m. but no doctor was called until about three-thirty, two hours later. There had been no more vomiting and the child had regained his good color but complained of pains low down near the rectum. About four p.m. he was brought to my office where a proctoscopic examination was made but with very unsatisfactory results. At this time the boy seemed rather pale, his face bore a worried expression and although he walked into the office there was the tendency to lean forward somewhat as he walked. Pulse 120. Temperature 99. Abdominal examination showed slight distention in upper half but none in the lower. No general or local tenderness or muscle rigidity could be detected at this time. He had voided since the injury and the urine was said to be normal looking. The child was sent home, two blocks away, put to bed with nothing by mouth or rectum until seen again within two hours. I did not believe at this time that the peritoneal cavity had been entered. Shortly before six o'clock the father called up to say that the boy had been complaining severely of pains in the back of his neck and under his ribs. This did not mean anything to me at that time. When I reached the house I was told that there had been no more vomiting and very little complaining of pains in abdomen or rectum but that soon after coming home he began to complain of pains under the rib margin, difficulty in breathing and pains in the back of his neck. Examination at this time showed more distention of the upper abdomen with pronounced tympanic note while the lower abdomen was, or seemed by comparison, retracted. The legs were flexed on the abdomen and a pillow was

under his shoulders. There was definite tenderness and some rigidity in lower half of abdomen now but the boy still insisted that the most pain was in the neck and under his ribs. The breathing was entirely thoracic and rather shallow. Deep breathing increased the pain. Pulse 120. Temperature 100. White blood count not done. Immediate operation was advised. This was done at eight p.m., about seven hours after the injury.

Upon opening the abdomen a definite amount of gas escaped. No free fluid or blood was found in the abdomen. A sponge on a stick, introduced into the pelvis returned with some soiling. Exposure of the rectum and bladder revealed a rent in the peritoneum just posterior to the bladder, about one cm. long. It gave one the impression that the instrument had struck the posterior wall of the bladder and then deflected. This impression was substantiated by the fact that the bladder was distended at the time of injury for the patient voided soon afterwards. There was no injury to the abdominal organs. The rent was closed and drains placed in the pelvis. The perirectal space was not drained in this instance and no harm resulted, but I do not consider this good practice as a rule. The patient made an uneventful recovery and is perfectly well today. He never again complained of pains under the ribs or in the neck.

As you have already guessed, the symptoms I wish to call your attention to in this case are pains beneath the costal margins, difficulty in breathing and pains in the back of the neck, which symptoms may manifest themselves very soon after injury.

My explanation for the cause of these symptoms is the entrance of air into the abdominal cavity.

DISCUSSION

In 1919 Stewart and Stein of New York, published their work on pneumoperitoneum and as a result the procedure was practiced pretty generally throughout the various clinics in this country as a helpful diagnostic method in obscure abdominal conditions. At one time it was even advocated by some as a safe office procedure. It was noted, however, that in a large percentage of the patients subjected to this procedure there was complaint of pains under the rib margin, in the shoulders and back of neck. In this same year I induced pneumoperitoneum in a number of patients at the University Hospital, Augusta, Ga., and with Dr. Palmer Holmes, roentgenologist, presented our results before the State

Medical Meeting that year in Macon. In our series we noted that pains under the rib margin, shoulders and back of neck was a rather common complaint. The location and character of the pains in the case presented today seem identical with those of induced pneumoperitoneum.

Gas entering the peritoneal cavity seeks the highest point, which is beneath the diaphragm. The amount of gas entering may not be very great and apparently it does not require very much to produce the symptoms noted above. The presence of the gas under the diaphragm is sufficient to explain the discomfort complained of in this region whereas the pains in neck and shoulders are referred. Patients suffering from stones in the gall-bladder frequently complain of pains in the right shoulder. These pains are referred to the segment of the cord from which the nerves supplying this area arise.

Cunningham's Anatomy tells us that the phrenic nerve, which supplies the diaphragm, arises from the third, fourth and fifth cervical nerves and has the following branches: 1. Muscular. 2. Pleural. 3. Pericardiac. 4. Inferior venaecaval. 5. Capsula. 6. Hepatic. We are also told that this nerve communicates with the sympathetic system above and below the diaphragm. With this diffuse and varied distribution I believe we are justified in assuming that the phrenic nerve is an afferent as well as an efferent nerve and thus explain how painful impulses arising on the abdominal side of the diaphragm may be referred to the neck.

The question now naturally arises why perforation anywhere along the gastro-intestinal tract with the escape of gas into the abdominal cavity does not give these symptoms. This, I believe, can be explained by the character of the contents of the major portion of this canal. Perforations above the rectum and lower bowel are followed by an escape of gas and liquid contents; because of the latter peritonitis rapidly develops and the symptoms and signs arising from this overshadow the symptoms produced by gas alone. Frequently the rectum contains only gas and again we may find the rest of the digestive canal free from gas but an accumulation in the rectum. X-rays of the gastro-intestinal tract, such as

the one I have here today, demonstrate this fact. Therefore, when the rectum is perforated by a foreign body and the peritoneal cavity entered gas alone may be admitted, aside from the soiled foreign body. Should there be feces in the rectum at the time of injury it would very likely be in a dry, firm state and the small amount carried in by the wounding instrument would constitute the infecting agent. This would not be repeated therefore peritonitis would be slower developing, despite the virulent character of the infecting agent, and nature has a better chance to localize the infection. Because of the more slowly developing symptoms and signs of peritonitis the symptoms produced by the presence of gas have an opportunity to manifest themselves.

CONCLUSION

Injuries to the rectum are always serious. The question as to whether or not the peritoneal cavity has been entered always arises. To await definite signs of developing peritonitis may be fatal, therefore any symptom or group of symptoms that may lead to an earlier diagnosis would be most helpful. Some of these cases, such as the one reported above, do present such symptoms and, when present, I believe are pathognomonic of perforation of the rectum.

DERMATOLOGIST

One dermatologist is so busy that he has no time to watch patients disrobe when they see him and he has them remove all their clothing in the ante room. He had just dismissed a case of pityriasis rosae and called for the next patient. A long shambling person, enveloped in a sheet, stumbled into the room and began, "Doctor, I-I-" "Now that will do," said the dermatologist. "Just keep quiet and let me look at your skin. Now just where is your trouble?" "What I'm trying to say, doctor," said the long person, "is that I'm selling vaccines and they wouldn't let me in with my clothes on."

—Morris Fishbein in *Mirrors of Medicine*.

DeSOTO HOTEL, SAVANNAH
Headquarters
Annual Session of Association
MAY 9, 10, 11

LUNG ABSCESS*

REPORT OF TWO CASES

FRANK K. BOLAND, M.D.
Atlanta

Thoracic surgery is one of the youngest specialties in medicine. Its tardy development has been due in part to the fear of producing pneumothorax in entering the thoracic cavity. Today, by the use of simple means, positive pressure may be maintained within the lungs so as to keep them fully inflated during exposure to the atmospheric air. Formerly, in order to prevent pneumothorax, it was thought necessary to employ some elaborate apparatus such as Sauerbruch's cabinet, the price of which was prohibitive. Now we know that inflation may be preserved by a closely fitting face mask, through which sufficient air or oxygen is forced into the lung.

Many lung diseases which heretofore have been treated by medicine exclusively have come into the realm of surgery, in properly selected cases. Conspicuous among such diseases are tuberculosis and bronchiectasis. The unequalled opportunity to study traumatic lung surgery during the World War has done much to further this branch of medicine.

Due to added facilities in diagnosis, abscess of the lung, while far less common than other pulmonary lesions, is being recognized with increasing frequency. While fundamentally a surgical condition, lung abscess is not always to be treated by surgical operation. Graham¹ states that more than 25% of cases heal spontaneously. The brilliant development of bronchoscopy, under Chevalier Jackson and others, has made it possible first, to diagnose the disease more accurately, and second, to cure some cases without the necessity of attacking the abscess through the chest wall.

Not so long ago it was believed that most lung abscesses were sequella of pneumonia. While it is true that pneumonia, particularly broncho-pneumonia of the influenza type, is responsible for a certain percentage of lung abscesses, the use of bronchoscopy and x-ray seems to prove that even a larger percentage

*Read before the Fulton County Medical Society, June 16, 1927.

follows foreign material carried to the lung either by aspiration or through the blood stream in the form of emboli. For example, Lord₂ in a recent analysis of 227 cases, traced only 12.3% in relation to pneumonia, and 49.7% to the aspiration of infected material in one way and another, from the upper respiratory tract; 34.3% could be traced to operation about the respiratory tract. Tonsillectomy was responsible for 49 of the 227 cases, and extraction of teeth accounted for 21 cases. 34.4% of the cases in Lord's series had an insidious onset and the cause was undetermined. In this class would fall cases secondary to subphrenic abscess and suppuration in distant parts of the body.

Moore₃, analyzing 202 cases of lung abscess subsequent to operation about the upper respiratory tract, found that 159 followed operation under general anesthesia, and 39 were the result of operation under local anesthesia. Such statistics support the general order given from the office of the surgeon-general during the war, that all tonsillectomies must be performed under local anesthesia. With a general anesthetic the cough reflex is, of course abolished so that infected material can easily reach the deeper air passages. Jackson has called the cough reflex the watch-dog of the lungs.

Equally good authorities appear to believe that lung abscess from infections in the upper respiratory area always result from aspiration, or always result from emboli. Perhaps it is true that abscess from aspiration forms in a bronchial tube, while abscess from emboli forms in the parenchyma of the lung, and is a true pulmonary abscess.

Other less common causes of lung abscess are direct trauma, such as gun-shot wounds, stab-wounds and fractured ribs; direct extension from an adjacent suppurating area, such as empyema, perforation of the diaphragm from liver or subphrenic abscess; and abscess from new growths in the lung. The first case described below apparently was an extension from empyema.

Lung abscess may be single or multiple, and the lower lobes are most frequently affected. An attempt has been made to give the location and number of abscesses which will follow different etiological factors, but there is no constancy whereby to establish workable

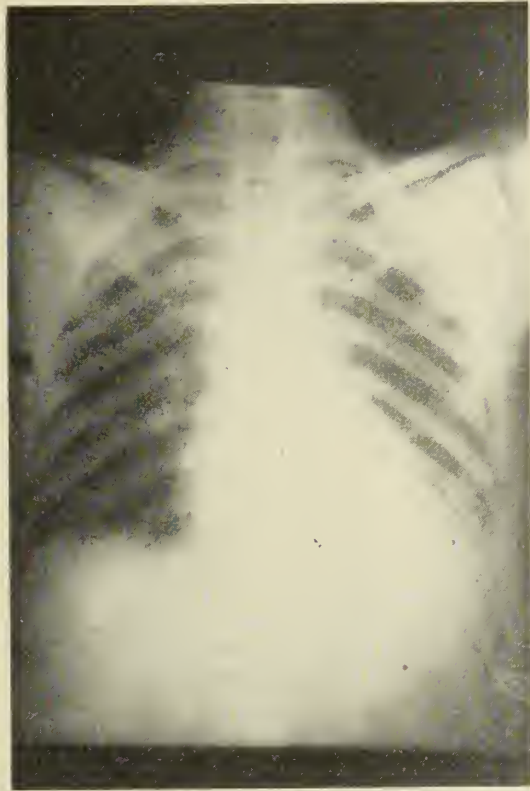
rules. The majority of abscesses develop in the periphery of the lung, and these are most amenable to surgical attack through the chest-wall. Those which develop in the hilus or central portion of the lung offer the best field for treatment through the bronchoscope. The usual pus-producing bacteria are found. Bronchiectasis often coexists with lung abscess, and may be difficult to distinguish from it. The recent use of iodized oil as an adjunct to x-ray has made possible more accurate diagnosis.

In arriving at a diagnosis, the history and symptoms usually are more reliable than the physical signs, which are in no way pathognomonic of the condition. Foul breath and foul sputum in large quantities are the most constant signs, although lung abscess in rare instances may occur without either. In the case of aspiration abscess Wessler₄ states that foul expectoration begins about the fourteenth day. Flick₅ reminds us that "in cases due to pneumonia or embolism from distant parts of the body, the evidence of development of pulmonary suppuration may be hidden by the constitutional symptoms and signs of the primary disease." The value of bronchoscopy in diagnosing and localizing the condition will be brought out in one of the cases herein reported.

The use of x-ray is indispensable. While the plea is being made constantly that the present generation of doctors depends too much upon laboratory diagnosis instead of their five senses, still when the laboratory offers a better means of diagnosis than we already have at our command it behooves us to give our patients the advantage of it. The x-ray is not infallible, and neither is any other means of diagnosis.

All writers unite in condemning diagnostic aspiration of lung abscess for fear infection may be introduced into the pleural cavity on withdrawal of the aspirating needle. In spite of this warning the procedure has been carried out without causing empyema. Nevertheless, such aspiration is looked upon as dangerous and diagnosis should be consummated by other means. Empyema added to existing lung abscess may add sufficient handicap to prevent the recovery of the patient.

The first principal in the treatment of lung abscess, as in any other abscess, is drainage.



Case 1. Abscess in base of left lung, following empyema, which has just finished discharging. The two drainage tubes which were in the empyema cavity are almost forced out.



Case 2. Abscess in upper lobe of right lung. Note that partial collapse of this lung also is present, inasmuch as the heart and trachea are displaced to the right, the right diaphragm is displaced upward, and the intercostal spaces on this side are narrowed.

Of all methods of drainage, the simplest, and by far the safest is by posture. Most cases will be aided, and some may be cured by this measure. All cases should first have the advantage of such treatment. Added to this should come next aspiration through skillful bronchoscopy. Even though cases may not be cured by these methods they become better prepared for later operative treatment, if indicated.

Methods of collapsing the lung are advocated as treatment of pulmonary abscess. Such methods include artificial pneumothorax, phrenicotomy, and more or less extensive extra-pleural thoracotomy. Good results have been reported from all these forms of treatment, but a large proportion of cases of lung abscess ultimately come to direct surgical attack through the chest wall.

A well-established principal in the operative treatment of lung abscess is that after rib resection and exposure of the pleura the ab-

cess must not be opened unless adhesions exist between the pleural surfaces at the point through which the abscess is to be drained. If such adhesions are not present, the operation must be done in two stages. The first stage consists of stitching the two pleural surfaces together in such a manner as to leave a sufficient area exposed through which the abscess will be opened by knife or cautery at the second stage of the operation, which will be done from one to two days later. All the pleural cavity except a space about 4 cm. in diameter is protected from the discharge of pus, thus preventing the development of empyema. The anesthetic of choice is local, or local combined with gas-oxygen, or ethylene.

CASE REPORTS

The two cases reported had lung abscess as only one lesion in a series of lesions in both cases. In both cases, however, lung abscess was diagnosed and operated upon, one resulting fatally, and the other with recovery. The description of both cases is beset with the difficulty that no one medical man saw them

from the beginning to the end of their illness. Thus each report must be pieced together from the records of different observers.

Case 1. E. L. J., aged 21, gave no past history of importance except that for about four weeks during the summer of 1926 he suffered from what he called indigestion, accompanied by dull pain at times in the epigastrium and about the umbilicus. There was slight nausea, but no vomiting. He did not consult a physician. One week before admission to the hospital in another part of the state, for the present illness, he began to have slight dull pain in the epigastrium which did not seem to be relieved or increased by eating. The pain was not severe, and was not accompanied by nausea, and he did not think much of it. The day before admission he ate some collards at lunch and during the afternoon the pain in the epigastrium became worse. He remained at his work as drug clerk until 9 p.m. About 5:30 a.m. the day of admission he was awakened with severe pain in the epigastrium and radiating toward the right iliac region. Later in the morning he was carried to the hospital, pulse being 82 and temperature 99. The physician who saw him at this time stated that there was tenderness and moderate rigidity over the entire right abdomen, being most pronounced in the epigastrium and at McBurney's point. The provisional diagnosis was appendicitis or cholecystitis. Feb. 5, 1927, laparotomy was performed through a right rectus incision over the appendix. A moderate amount of sero-purulent fluid without odor was found. The appendix was acutely inflamed, and was removed; the gallbladder appeared normal. Two cigarette drains were inserted, one being removed on the third and one on the sixth day. Only a slight serous exudate was ever seen. Convalescence was normal, and the patient went home in another town on the 17th day after operation. Feb. 23rd, the patient was seen by another doctor who made a diagnosis of abscess in the right lower abdomen, and chronic nephritis. Leucocyte count was 14,000, with an increase in the polys. Under local anesthesia a second right rectus incision, about one inch external to the first one was made, and three ounces of thick green pus was evacuated. The wound drained but very little thereafter.

At the time of this operation there was again pain and tenderness in the gallbladder region. March 10th, the patient developed peritonitis, with symptoms of intestinal obstruction. I saw him in consultation, at this time, and advised gastric lavage, passage of colon tube, and hot stupes to the abdomen, which was distended and hard. His poor condition did not justify a third laparotomy. His bowels moved after this and for a while

he was better. March 19th, empyema of the left chest was discovered, and eight ounces of pus was removed through an intercostal incision.

March 23rd, the patient was brought to Atlanta. An x-ray taken at this time showed what was believed to be an abscess in the lower lobe of the left lung. The patient was still exceedingly tender over the gallbladder, suggesting cholecystitis or subphrenic abscess. March 26th, under gas-oxygen anesthesia, incision was made over the gallbladder. A pocket of pus was found just inside the peritoneum. It was impossible to tell the source of the pus without greater exposure, which the patient's condition did not warrant. On inserting a finger into the abdomen, there was a discharge of gas, serous fluid and bile. The presence of such substances indicated that a perforation of the duodenum or stomach had taken place. A large drainage tube was left in the abdominal wound, and attention given to the chest. The empyema cavity, which had drained for a week, apparently had become obliterated, and the lung was pressed against the chest wall. A forceps was passed into the lung, in a direction guided by the x-ray shadow, and there was a gush of typical lung contents, very foul pus, and much blood. The hemorrhage was so great that the cavity was packed with gauze, for which tubes were substituted several days later. Drainage was satisfactory even without rib resection.

Following these procedures there was a continuous flow of bile and stomach contents from the abdominal wound. Fluid taken in the mouth immediately escaped from the fistula. Inanition increased rapidly, and in spite of glucose and saline given in every manner, and several blood transfusions, death supervened sixteen days later. At one time the nurse thought food passed from the chest wound, which, of course, was possible. In this case the lung abscess would have been caused by direct extension from the subphrenic abscess. Autopsy would have been instructive, but was not obtained.

Case 2. W. L. C., aged 40, for several years previous to admission, July 29, 1925, had several attacks of severe pain in the abdomen and back, which were not diagnosed. Six weeks before admission he experienced sudden violent pain in the upper abdomen, to the left of the midline, requiring many hypodermic morphine for relief. There was no nausea or vomiting. After three days the acute pain subsided, followed by abdominal soreness and tenderness, which were present when he entered the hospital. For the past five weeks the patient had run a daily temperature of 100-102, accompanied by sweating, loss of appe-

tite and weight. Leucocytes 15,000; polys 80%. The diagnosis made by his physician was perforated gastric ulcer, with formation of subphrenic abscess, although the radiographs were inconclusive.

July 31st, under gas-oxygen-novocain anesthesia, a median incision was made above the umbilicus. The stomach, duodenum and gallbladder appeared to be normal, with the exception of adhesions about the cystic duct, and between the stomach and diaphragm. Pus could not be demonstrated, although one had the feeling that it was near by. The patient's condition grew so bad that the search was discontinued abruptly, the wound being closed with the insertion of drains left under the liver and above the stomach.

On seeing the patient a few hour after the operation, the nurse stated that he had vomited a large quantity of pus, with some blood, and she showed two emesis basins full of such matter. The next morning it was reported that he had passed several copious stools containing pus, and these were exhibited. Three days later pus began to drain from the abdominal wound. Evidently a gastric ulcer had perforated through the posterior wall of the stomach, and formed a subphrenic abscess. The manipulations of the operation caused the abscess to discharge back into the stomach, which accounted for the pus in the vomitus and stool.

In spite of free drainage, for two weeks the temperature continued as high as before the operation. Following one intravenous injection of 5 cc. of mercurchrome, .5%, which produced a violent reaction, the patient began to improve, and soon returned home. After being back at his work for several weeks he developed cough, fever and pain in the right chest. Tuberculosis was feared, and he consulted Dr. A. H. Bunce, who found no bacilli, but made a diagnosis of abscess of the upper lobe of the right lung. At this time it also was discovered that the patient had developed a large ventral hernia in the abdominal wound, as a result of violent coughing. He was now expectorating large amounts of foul sputum. Change of position in the bed produced paroxysms of coughing, accompanied by vomiting. The loss of food caused great emaciation and weakness. His teeth were bad, and pyorrhea was rampant. He had all his teeth extracted without appreciable improvement, while inability to use his dental plates prevented mastication and added to his loss of weight. Autogenous vaccine made from his sputum did not seem to ameliorate the condition. Postural drainage carried out persistently produced no permanent good effect.

March 15, 1926, Dr. Murdock Euen bron-

choscoped the patient, and showed pus coming from the upper lobe of the right lung. This pus was aspirated, and the discharging bronchus sprayed with mercurchrome. From the pus a vaccine was prepared, the administration of which caused considerable improvement. Although the bronchoscopy was skillfully and painlessly done, under local anesthesia, the patient would not submit to another treatment.

April 20, 1926, under gas-oxygen-novocain, two inches of the third rib in front was removed, pleura exposed, found normal, and the two pleural surfaces stitched together, so as to form adhesions over a space about the size of a silver dollar. An x-ray taken the next day, with a lead marker over the middle of the incision, showed the excision of the rib was practically over the center of the abscess. April 24th, with the same kind of anesthesia, the abscess was opened with cautery. Pus was found two inches from the surface of the lung; it was thick and bloody, with characteristic odor. At first the flow was rather scanty, but in a few days was profuse.

Convalescence was slow and tedious, but by careful nursing and judicious feeding, for which the patient's devoted wife deserves the most credit, the abscess healed, and he made a complete recovery. The ventral hernia yet remains to be repaired. When he left the hospital, six weeks after operation, his weight was 65 pounds; when seen last, December 5, 1927, 20 months after operation, his weight was 145 pounds.

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"The Hebrew Physician," (HaRofeh HoIvree), the only medical journal published outside of Palestine which is written in Hebrew, has just made its initial appearance. This Journal is under the editorship of Dr. Moses Einhorn and Dr. A. Goldstein. It contains articles on general medical subjects and has a special section devoted to new Hebrew medical terminology. All physicians who are interested in this journal are requested to communicate with the editors, addressing them care "The Hebrew Physician," 286 West 86th St., New York City.

REPORT OF THE ANNUAL MEETING OF THE SURGICAL ASSOCIATION

THE ATLANTA AND WEST POINT RAIL ROAD
COMPANY

THE WESTERN RAILWAY OF ALABAMA
THE GEORGIA RAILROAD

AND

THE ELBERTON AND EASTERN RAILROAD

The Eighth Annual Meeting of the Surgical Association of The Atlanta and West Point Railroad Company, The Western Railway of Alabama, The Georgia Railroad and The Elberton and Eastern Railroad was called to order in the meeting room of the Henry Grady Hotel, Atlanta, Ga., at 9:00 A.M., on Thursday, February 9, 1928, by the President, Dr. Harry Moses of Macon, Ga.

Minutes of the last meeting and report of the Treasurer were read by Mrs. R. E. Cooper, Secretary and Treasurer, and by unanimous vote were approved.

The President next appointed Dr. H. M. Miehle, Dr. T. E. Oertel and Dr. C. S. Jernigan as a nominating committee to report at the afternoon session, nominations for President, Vice-President and one member of the Executive Board.

At this point the regular order of business was suspended and the question of adopting the International Journal of Medicine and Surgery as the Official Organ of this Organization was considered on suggestion of President Moses, seconded by Dr. A. W. Davis. Doctors J. M. Poer, W. W. Harper, H. M. Miehle, S. R. Benedict and J. R. Garner spoke regarding the advantages to the members and of the high character of the Journal and recommended the adoption. Telegrams from Dr. Frank C. Lewis, Managing Editor of the International Journal of Medicine and Surgery were read by the Secretary, after which a motion made by Dr. W. W. Harper and seconded by Dr. H. M. Miehle to the effect that the International Journal of Medicine and Surgery be adopted as the Official Organ of this Organization, and that the Executive Committee be instructed, with power to act, to arrange for same, was unanimously adopted.

The scientific program was next taken up and the following topics were presented and discussed:

(1) Traumatic Appendicitis, by Dr. W. C. McGeary of Madison, Ga., was discussed by Drs. Poer, Donald and Harper.

(2) Dr. Richard Binion of Milledgeville, Ga., offered the topic of Traumatic Inguinal Hernia, which was discussed by Drs. Miehle, Benedict, Harper and Garner.

(3) Management of Head Injuries was presented by Dr. W. H. Clark of LaGrange, Ga., and discussed by Drs. Oertel, Harper, Benedict and Moses.

(4) Dr. V. P. Sydenstricker of Augusta, Ga., was to have presented a paper on Cardio-Vascular-Renal Conditions affecting Man-Power but owing to an illness was unable to attend the meeting and Dr. L. P. Holmes, Roentgenologist of the University Hospital, Augusta, Va., very kindly consented to substitute for Dr. Sydenstricker. His topic was the value of the X-ray in railroad practice. Discussing same were Drs. Moses, Garner, Poer and Miehle.

(5) Pain in the Back was presented by Dr. H. M. Miehle of Augusta, Ga., and discussed by Drs. Harper, Garner and Holmes.

At one o'clock the meeting adjourned for luncheon.

Luncheon was tendered the members of the organization by the chief surgeon for the railroads, and was most enjoyable. While the members partook of these viands, music was rendered by the General Office Orchestra of these lines and specialty dancing was given by Misses Tootsie Dunbar and Freida Sullivan. These features added much to the enjoyment of the occasion and received much applause from the members. Immediately following the luncheon addresses were made by Dr. L. G. Hardman, Governor of Georgia; Mr. J. A. Perry, Chairman of the Georgia Public Service Commission and Mr. Fred Houser, Official Secretary of the Atlanta Convention Bureau.

The meeting reconvened at 3:00 P.M., being called to order by the president. Dr. Eugene E. Murphey of Augusta, Ga., was to have presented a paper on Conserving the Health of Railroad Employees, but was unable to be present on account of illness so

that the first item on the program of the afternoon session was:

(1) An address by Mr. Chas. A. Wickersham, President-General Manager of the Atlanta and West Point Rail Road Company, The Western Railway of Alabama and the Georgia Railroad.

(2) Dr. S. R. Benedict, Chief Surgeon of the Alabama Power Company was a guest of the association at our meeting, and presented a most interesting talk on "Some Interesting Fractures" which he illustrated by a number of lantern slides, which were thrown upon the screen through courtesy of Dr. R. H. Fike, Roentgenologist of the Steiner Cancer Clinic of Atlanta, Ga.

As the next paper was also to be on Fractures, a motion was made and carried that we proceed to the reading of that paper and then discuss jointly both the Fracture topics.

(3) Dr. W. W. Harper of Selma, Ala., presented an interesting paper on united Fracture and an interesting paper on Ununited Fracture of the Femur.

The topics of Drs. Benedict and Harper were discussed by Drs. Garner, McGeary, Michel, Moses and Harper.

At the conclusion of the scientific program the business session of the association was taken up. There was no unfinished business, and under new business a motion was made by Dr. Harper that we thank the management for the splendid entertainment given the members on this occasion: Dr. Fike for displaying the lantern slides, and our guests for their contribution to our pleasures and enlightenment. This motion was seconded by Dr. Oertel and unanimously adopted.

The Nominating Committee next reported as follows:

For President—Dr. C. A. P. Ebbert of Grantville, Ga.

For Vice-President—Dr. Richard Binion, Milledgeville, Ga.

For Secretary-Treasurer—Mrs. R. E. Cooper, Atlanta, Ga.

For Member Executive Board—Dr. H. M. Lokey, Atlanta, Ga.

All nominees were unanimously elected.

Dr. Garner, Chief Surgeon of these Lines and Chairman of the Executive Board re-

ported that during the year that Dr. J. H. Kimbrough of Lowndesboro, Ala., had resigned as local surgeon at that point, and was therefore no longer eligible for membership in the association. He also advised that the following had been appointed to the Surgical Staff to one or the other of these railroads and were therefore now considered as members of this association:

Dr. W. C. Dabney, Atlanta, Ga.

Dr. C. W. Harvey, Hogansville, Ga.

Dr. R. O. Lee, LaGrange, Ga.

Dr. P. Y. Donald, Selma, Ala.

Dr. M. F. Cochran, Newnan, Ga.

Dr. T. F. Abercrombie, Atlanta, Ga.

Dr. S. W. Welch, Montgomery, Ala.

Dr. R. B. Haygood, Lowndesboro, Ala.

There being no further business to come before the Association, the President-elect was escorted to the chair where he made a short address and declared the meeting adjourned.

MRS. R. E. COOPER,
Secretary.

CALCIFYING HEMANGIOMA

Herman F. Johnson, Omaha (Journal A. M. A., April 7, 1928), discusses the deep angiomias of the venous type with calcification and gives a brief review of the literature. The symptoms are those of pressure on surrounding tissues with referred pain. There is occasionally a fusiform swelling, which is tender. The overlying skin as a rule is not discolored, for the tumor is deep seated. In some cases a few of the calcified bodies have been palpable. A clinical diagnosis of this condition is practically impossible without the aid of the roentgenogram; however, in obscure cases presenting the symptoms already outlined, it should be considered. The roentgenogram gives very definite but not conclusive evidence, as the calcified bodies closely resemble cysts of parasitic diseases. Exploration with the finding of the hemangioma is final proof. The treatment is surgical when possible, and as the majority of cases are confined to the extremities, excision of the tumor is the logical procedure. Hemorrhage as a rule is considerable, and a tourniquet is advisable. The prognosis is favorable when the entire tumor mass can be removed.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

APRIL, 1928

ALLEN H. BUNCE, M.D., Editor

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Articles are accepted for publication on condition that they are contributed solely to this Journal.

Manuscripts should be typewritten, double-spaced, and the original (not the carbon copy) submitted. Used manuscript is not returned unless requested.

Communications and items of general interest to the profession are invited from all parts of the State. We especially invite county society secretaries to send us information of happenings in the county that would be of interest to the members throughout the State.

Reprints should be ordered within 30 days after the appearance of an article, since all type will be destroyed at the end of that time.

Editorial Department

DR. M. HINES ROBERTS WINS
CRAWFORD W. LONG
MEMORIAL PRIZE

Dr. M. Hines Roberts,
104 Ponce de Leon Ave.,
Atlanta, Ga.

My dear Dr. Roberts:

As chairman of the committee controlling the prize offered by the Crawford W. Long Fund, it gives me great pleasure to advise you that your excellent paper entered in the prize essay contest has been awarded the Crawford W. Long Prize for the year 1927. This prize will be formally presented to you at the meeting of the Medical Association of Georgia to be held in Savannah May 8, 9, 10, 11, 1928. I trust you will be present to receive it. I furthermore wish to extend to you my hearty congratulations upon your success.

I am,

Sincerely,

WM. R. DANCY, *Chairman*,

Crawford W. Long Prize Committee.

Savannah, Feb. 16, 1928.

Dr. Roberts' paper is the first in this issue of the Journal.

**SAVANNAH WELCOMES THE
ASSOCIATION**

The 79th annual meeting of the Medical Association of Georgia will be held May 9th, 10th, 11th, in Savannah, Ga. The famous and picturesque De Soto Hotel, situated on Bull Street in the center of that city has been recently refitted and will be the headquarters of the Association.

The general assembly hall will be used for the essays on the program, other halls, rooms, and spaces will be occupied by the House of Delegates, the Council, the Committees, and the Exhibitors. As the accommodations will be well taken it is suggested that those desiring rooms at the De Soto engage them in advance. The Hotel Savannah, Hicks Hotel, and the John Wesley Hotel will also give satisfactory accommodations. Seven miles out of the city, on the beautiful Wilmington River, is the new Hotel General Oglethorpe. Those having automobiles may prefer to locate there.

On the evening of Thursday, May 10th the members of the profession in Savannah will entertain as guests the Association at a banquet to be held at the Hotel General Oglethorpe. Coincident with the banquet of the physicians, there will be a banquet in another dining room enjoyed by the Woman's Auxiliary. After these banquets there will be a dance held in the beautiful ball room of the General Oglethorpe until one o'clock a.m.

During the banquet the Crawford W. Long prize will be presented to the winner in the last year's prize essay contest for the best original work done during the year 1926-1927 and presented at the annual session of the Medical Association of Georgia.

One splendid feature of the approaching meeting which is anticipated with great interest is the address which will be delivered by Dr. de Schweinitz of Philadelphia who is the invited guest of the Abner Calhoun Memorial Fund. This fund, as is well known, is composed of generous donations from the profession at large, and from public spirited individuals interested in the progress of medicine. It is hoped that every physician in Georgia has contributed to this fund.

Savannah is prepared to receive its visitors in its usual hospitable way. An unusually at-

tractive program with delightful social entertainments is promised. Do not fail to meet with us in Savannah, the city beautiful, historical, and hospitable.

WM. R. DANCY, M.D.,
General Chairman,

Committee on Arrangements.

Savannah, Ga., March 20, 1928.

OFFICIAL PROGRAM

In this issue will be found the official program for the Savannah meeting. The Committee on Scientific Work found it very difficult to select from the large number of titles submitted those to be included in the final program. Many excellent subjects were omitted and a number of members were left off the program not because of the subjects submitted or because of the desire of the committee to omit any title, but because it was absolutely impossible to include them in the three days' time allowed for the annual session.

Particular attention is called to the scheduled meetings of the House of Delegates. In order that these meetings may interfere as little as possible with the general meetings only two days have been listed for meetings of the House—Tuesday at 2:30 and 8:00 p.m. and Friday at 9:00 a.m. This was done at the suggestion of our President since it was believed that practically all the routine business of the session can be completed on Tuesday and Wednesday morning before the opening of the general meeting. This will cause a minimum of conflict between the meetings of the House of Delegates and the scientific program.

Our President, Dr. W. A. Mulherin, especially requests that all committees have complete written reports to be submitted to the House of Delegates. He also requests that all resolutions be submitted in writing so that their exact contents may be contained in the minutes.

Now is the time for all members to rally to the aid of our President and give him the largest paid membership in the history of the Association. It can be done. May we depend on you to do your part?

HEALTH EXAMINATIONS

The Committee on Health and Public Instruction, with the co-operation of the Committee on Arrangements, has perfected plans for health examinations of all members and their families. An appointment book will be kept at the registration desk so that appointments for these examinations may be made. This is necessary in order that the examiners may be prepared to take care of all desiring this service. Please fill out the card that will be given you when you register stating the exact time you want to be examined and secure an appointment as soon as possible and thus avoid overcrowding. A complete report showing your health grade will be given you when the examination is completed.

THE CALHOUN LECTURESHIP

We have been very fortunate in securing Dr. George E. de Schweinitz of Philadelphia, past president of the American Medical Association, to deliver the first address under the Abner Wellborn Calhoun lectureship. His subject will be "Headaches." His address will be given on Wednesday morning and we urge all members to be present since Dr. de Schweinitz is one of the ablest speakers in the profession and his address alone will well repay attendance at this session.

Incidentally, have you sent in your subscription to the fund to establish this lectureship? Many have already done so but committee in charge reports that many more are desired and will be necessary in order to complete the fund at this session. Send your check to Dr. F. K. Boland, Doctors' Building, Atlanta, Treasurer.

HOSPITAL SERVICE IN GEORGIA

In this issue we are publishing the Georgia section of the report of the Council on Medical Education and Hospitals of the American Medical Association. It contains a complete list of hospitals in Georgia which have been admitted to the Hospital Register of the A. M. R. The survey of hospital service in the United States represents an immense expen-

diture of time and labor on the part of the Council but it is fully justified when we see the results which are being accomplished. Hospital service, nursing service and medical service are intimately connected and the improvement of one will help the others. It is to be hoped that all those responsible for hospital service in Georgia will study this report carefully and strive in every way to bring the Georgia hospitals to an even higher state of efficiency.

THE DEDUCTIBILITY OF TRAVELING EXPENSES: A CRISIS

Do you want for yourself and your fellow physicians the right similar to that accorded to other professional and business men to deduct in the computation of federal income taxes expenses incurred in attending meetings of medical organizations? The Robinson amendment to the Revenue Reduction Bill (H. R. 1) authorizes the deduction of such expenses. The Senate Committee on Finance will consider that amendment at an early date. A brief to be submitted in support of that amendment on behalf of the American Medical Association is printed on pages 88 to 95 of this issue. Read it, then telegraph or write to your Senator to support the amendment.

If the amendment is adopted and passed by the Senate, it will have to be passed by the House of Representatives before it becomes a law, so write to your Representative at the same time.

Unless you demand now that this unjust discrimination against the medical profession be discontinued, you will not be in a position to complain of its continuance.

—A. M. A. Bulletin, March, 1928.

INTER-STATE POST-GRADUATE MEDICAL ASSOCIATION OF NORTH AMERICA COMING TO ATLANTA IN OCT., 1928.

This is good news to every general practitioner, surgeon and specialist. The association has grown from a little Tri-State to a proportion of international importance. Nothing else in medical organization offers to the searching, investigating, medical mind what this association offers at its annual meetings.

Though only seven years old, its growth has been phenomenal, due to the leadership which conceived the idea of clinical lectures, which are responsible for the popularity of its meetings.

Only the best, which America and foreign nations have to offer is given to the audience in the form of clinics, lectures, lantern slides and moving pictures. It is an inspiration to see how eager the 5,000 attendants are to catch every word spoken and the determination manifested by them by the regular attendance of the three regular daily sessions, beginning Monday morning at seven o'clock and closing Friday evening at six o'clock.

One sees old and young men assembled at seven o'clock in the morning ready for the first speaker. An opportunity to see and hear the best that organized medicine of the world offers is here given to the members of the Georgia Medical Association and also to the members of the adjoining and nearby State Medical Associations. Not one of our members should miss this meeting, because it means so very much toward strengthening our association by instilling enthusiasm and love for our profession and creating a lasting incentive for better work.

TOEPEL.

SEASONAL PREVALENCE OF TULARAEMIA

Seasonal incidence of cases of tularaemia, according to the United States Public Health Service, is due to the season variation of three sources of infection, tick bite, fly bite and the dressing of wild rabbits, but owing to the overlapping of these influences, cases have occurred in the United States in every month of the year. The great reservoir of infection and the greatest source of human infection from tularaemia is the wild rabbits, jack, cottontail and snowshoe varieties, but owing to the agencies of blood sucking insects common to rabbits and man, we find cases resulting from tick bite and fly bite.

Four hundred and twenty cases of tularaemia have been reported, of which 17 have died. This places the mortality at about 4 per cent. These figures embrace only the cases which have been reported to the Public

Health Service, but considering the newness of the disease, they probably represent only a portion of the actual number of cases and deaths.

Cases have now been reported from Japan, from the District of Columbia and from 37 States. The nine northeastern States, being the only significant portion of the United States in which cases have not been recognized.

A STUDY OF TONSILLITIS

In view of the widespread attention which has been given in recent years to tonsil defects and their remedy by tonsillectomy, it was deemed worth while for the Public Health Service to make a study of acute and chronic diseases of the tonsils and throat. The results of this study are given in a Public Health Bulletin (No. 175) recently issued.

The incidence of tonsillitis and related conditions of the pharynx is higher among children of school ages than before or after those ages. Laryngitis, on the other hand, appears to occur more frequently among adults than among pre-school or school children. Tonsillitis and related conditions of the pharynx appear to be the only important respiratory affection which shows this particular age incidence, that is, higher during the school ages than among younger or older persons.

The incidence of tonsillitis and related conditions of the pharynx appears to be considerably higher for females than for males.

The relative age incidence of acute tonsillitis and sore throat is strikingly similar to the relative age prevalence of diseased tonsils as found on physical examination. The relative prevalence of enlarged tonsils as found on physical examination is also similar to the relative age incidence of acute tonsillitis and sore throat, but does not show as close correspondence as the curve for diseased tonsils.

The prevalence of defective tonsils does not seem to be significantly greater in rural than in urban districts. Removal of the tonsils, however, was considerably more frequent in the urban groups examined than in the rural.

The incidence of certain non-respiratory diseases varies with the condition of the tonsils. The incidence of illness from rheumatism, heart conditions, cervical adenitis, and ear conditions tends to be lowest among children with normal tonsils, higher among those with defective tonsils, and highest of all among those whose tonsils have been removed. Presumably these more or less chronic conditions clear up only slowly, if ever, after the tonsils have been removed.

The incidence of illness from rheumatism and related conditions appears to be higher among adults who have attacks of tonsillitis than among those who are free from tonsillitis.

The incidence of measles, whooping cough, chicken pox, and mumps all appear to be higher among children whose tonsils have been removed than among either of the groups with the tonsils present. Similar differences are indicated by rates based on susceptible children only, eliminating from consideration all children who had suffered a recognized attack of the disease prior to the period of observation.

The results of the physical examination suggest that adenoids, enlarged cervical glands, conjunctivitis, eye strain, and decayed teeth all tend to be slightly more prevalent among children with defective tonsils than among children with normal tonsils or among those whose tonsils have been removed.

Height and weight measurements and records of growth in weight over a period of nine months for a group of school children did not show any advantage in the growth of one tonsil group over another. Data from the literature seem to indicate a more rapid growth immediately following tonsillectomy, but this does not appear to continue for any extended period of time.

OLECRANON BURSTITIS

In view of the fact that the olecranon process is so superficially located, that the cortex of the bone is extremely thin and also that the cells are of a cancellous nature, W. W. Lasher and L. M. Mathewson, New York (Journal A. M. A., March 31, 1928), believe that these bony cells are frequently injured at the same time that the injury to the bursa itself occurs. The close proximity of the large subcutaneous bursa to the elbow joint itself is to be remembered, as it is separated from the articulation only by the posterior portion of the orbicular ligament, and in one of the authors' cases was seen to communicate directly with the joint. An operation which does not completely remove the secreting lining of the bursa in a short time forms a sinus which drains clear synovial fluid. Unless the greatest care is exercised in subsequent dressings, this sinus will soon become infected. The occurrence of an osteomyelitis as an almost invariable complication does not seem to require any further explanation when one considers the close proximity of injured bone cells to the bursal infection. When a bursa is distended with pus, the most natural site of extension would be at its bony attachment. Patients seen early and operated on immediately make a rapid and complete recovery.

Medical Association of Georgia

Seventy-Ninth Annual Session

SAVANNAH

May 9, 10, 11, 1928

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 Alternate, B. T. Wise Plains
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| W. M. Folks | Waycross |
| W. A. Coleman | Eastman |
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FRATERNAL DELEGATES TO OTHER STATE MEETINGS

To visit Alabama: J. M. Anderson, Columbus;
Loren Gray, Georgetown.

To visit Florida: Wm. R. Dancy, Savannah; J. M.
Smith, Valdosta.

To visit North Carolina: C. W. Roberts, Atlanta;
R. M. Goss, Athens.

To visit South Carolina: Henry M. Michel, Au-
gusta; C. C. Harrold, Macon.

To visit Tennessee: R. M. Harbin, Rome; S. M.
Howell, Cartersville.

ANNOUNCEMENTS

Meetings will be held in the Assembly Room,
DeSoto Hotel.

Be sure to go to the Registration Desk, present your
1928 card and procure a badge immediately on your
arrival.

Discussion of papers is open to all members and
guests of the Association. It is not limited to those
named on the program.

On arising to discuss a paper the speaker will please
announce his name and address clearly for the benefit
of the Association and stenographer.

Meetings will be called to order at the hour fixed on
the program. It is especially desired that the members
be prompt in their attendance.

All manuscript should be typewritten, double spaced
and on one side of the paper only. Papers must be
handed to the Secretary immediately after being read.

IMPORTANT NOTICE!

Delegates must present written credentials to the
Committee on Credentials from the House of Delegates
to secure Delegates' Badges.

Members may not take part in the proceedings until
they have registered and procured official badges.

PUBLIC MEETINGS

WEDNESDAY, MAY 9, 10 A.M.

OPENING MEETING

THURSDAY, MAY 10, 12 NOON

PRESIDENT'S ADDRESS

The President's Address will be at an open session
to which the public and visitors are invited.

ENTERTAINMENTS

WEDNESDAY, MAY 9, 6:30 P.M.

Annual dinner of the alumni of the University of
Georgia Medical Department, DeSoto Hotel.

Annual dinner of the alumni of Emory University
School of Medicine, DeSoto Hotel.

THURSDAY, MAY 10

8:30 to 10 P.M.

Banquet at General Oglethorpe Hotel.

Presentation of "Badge of Service" to the President,
W. A. Mulherin by R. L. Miller, Waynesboro.

10 to 1 P.M.

Dance.

PERIODIC HEALTH EXAMINATIONS

Arrangements have been made to have the members and their wives physically examined by competent physicians.

Make your appointment for the examination immediately after registration.

SPECIAL MEETINGS

MEETING OF SECRETARIES OF DISTRICT AND COUNTY SOCIETIES

Round table conference of the Secretaries of District and County Societies, Thursday, May 10, 5:30 P.M., Men's Parlor, DeSoto Hotel. All Secretaries of District and County Societies are expected to be present. Each one will be called upon for a report of conditions in his Society and suggestions for improvement of the organization. The President, members of the Council and all general officers of the Association will be present.

MEETING OF THE COUNCIL

The first meeting of the Council will be held in the House of Delegates' room, Men's Parlor, DeSoto Hotel, Tuesday, May 8, at 5:00 P.M. Each Councilor will render a written report of conditions in each county in his District. Other meetings of the Council will be held on the call of the Chairman.

MEETINGS OF THE HOUSE OF DELEGATES

Men's Parlor, DeSoto Hotel

TUESDAY, MAY 8, 2:30 P.M.

First meeting of the House of Delegates.

1. Call to order by the President.
2. Roll Call.
3. Report of Officers.
4. Report of Council by the Chairman.
5. Report of Committees.
 - a. Scientific Work.
 - b. Public Policy and Legislation.
 - c. Arrangements.
 - d. Medical Defense.
 - e. Hospitals.
 - f. Necrology.
 - g. Health and Public Instruction.
 - h. Cancer Commission.
 - i. History.
 - j. Constitution and By-Laws.
6. Report of Delegates to the A. M. A.
7. Unfinished Business.
8. New Business.

FRIDAY, MAY 11, 8:00 A.M.

Men's Parlor, DeSoto Hotel

Third meeting of the House of Delegates.

1. Call to order by the President.
2. Reading of Minutes.
3. Reports of Committees.
4. Unfinished Business.
5. New business.

PROGRAM

The papers for each meeting must be read as scheduled on the program.

WEDNESDAY, MAY 9, 1927

DeSoto Hotel

10:00 A.M.

Call to order by the President, Wm. A. Mulherin, Augusta.

Invocation

Rev. Frederick F. Reese Savannah

Welcome

G. H. Lang Savannah

President, Georgia Medical Society

Response to Address of Welcome

Eugene E. Murphey Augusta

Scientific Papers

1. Georgia's Health Problems,
T. F. Abercrombie, Commissioner of Health,
To lead in discussion:
V. H. Bassett, Savannah,
Paul Eaton, Augusta.
2. Tularemia,
J. A. Redfearn, Albany,
To lead in discussion:
W. C. Goodpasture, Atlanta,
M. E. Winchester, State Board of Health.
3. The Importance of Eye Examinations in the Diagnosis of Intra-Cranial Lesions,
Chas. E. Dowman, Atlanta,
To lead in discussion:
B. H. Minchew, Waycross,
J. Calvin Weaver, Atlanta.
Introduction of Dr. George E. de Schweinitz, Philadelphia, by Dr. James E. Paullin, Atlanta.
Abner Wellborn Calhoun Lecture—Concerning Headaches, Being an Essay on Certain Etiologic Factors, and on So-Called Distinctive Features and Their Mimicries.
George E. de Schweinitz, Philadelphia, Professor of Ophthalmology, Jefferson Medical College of Philadelphia.

WEDNESDAY, MAY 9, 2:30 P.M.

Clinics

4. Surgical Diseases,
W. B. Crawford, Savannah.
5. Surgery,
Frank B. Boland, Atlanta.
6. Surgery,
C. C. Harrold, Macon.
7. Medicine,
E. E. Murphey, Augusta.
8. Care of Premature Baby,
A. J. Waring, Savannah.
9. Gynecological Cases,
Wm. H. Myers, Savannah.
10. Pathology,
Lee Howard, Savannah.
11. Skin Diseases,
S. Elsom Bray, Savannah.

WEDNESDAY, MAY 9, 8:00 P.M.

12. Pulmonary Aspergillosis,
E. F. Wahl, Thomasville.
To lead in discussion:
V. P. Sydenstricker, Augusta.
Hal M. Davison, Atlanta.
13. The Prognosis of Tumors with Special Reference to Cell Type and Its Influence on Treatment,
Everett L. Bishop, Atlanta.
To lead in discussion:
R. V. Lamar, Augusta.
Geo. B. Adams, Atlanta.
14. Mucous Colitis,
Stewart R. Roberts, Atlanta.
To lead in discussion:
W. R. Houston, Augusta,
Wm. R. Dancy, Savannah.
15. Complete Prolapse of the Rectum-Lantern Slides,
W. E. Person, Atlanta.
To lead in discussion:
Chas. H. Watt, Thomasville,
Stewart D. Brown, Royston.
16. A Procedure for Accurate Reduction of Supra-Condylar Fractures of the Humerus—Motion Pictures and Lantern Slides,
Lawson Thornton, Atlanta.
To lead in discussion:
Kenneth McCullough, Waycross,
Grady N. Coker, Canton.

THURSDAY, MAY 10, 9:00 A.M.

17. A Better Medical Society,
E. C. McCurdy, Shellman.
To lead in discussion:
G. Y. Moore, Cuthbert,
J. O. Elrod, Forsyth.
18. Urinary Antiseptics,
Montague Boyd, Atlanta.
To lead in discussion:
H. Y. Righton, Savannah,
W. F. Reavis, Waycross.
19. What Is Needed to Improve the Practice of Obstetrics,
J. R. McCord, Atlanta.
To lead in discussion:
C. K. Sharp, Arlington.
A. J. Mooney, Statesboro.
20. Medical Economics,
W. P. Harbin, Rome.
To lead in discussion:
Theodore Toepel, Atlanta,
J. H. Downey, Gainesville.
21. The Home Management of Diabetes Mellitus,
W. E. McCurry, Hartwell.
To lead in discussion:
H. M. Bowcock, Atlanta.
H. I. Reynolds, Athens.
22. The Treatment of the Anemias with Liver Fraction,
Glenville Giddings, Atlanta,

To lead in discussion:

Jno. W. Daniel, Savannah,
J. E. Paullin, Atlanta.

THURSDAY, MAY 10, 12 NOON

President's Address

Wm. A. Mulherin, Augusta

THURSDAY, MAY 10, 2:30 P.M.

23. Congenital Hypertrophic Stenosis of the Pylorus,
A. R. Rozar, Macon.
To lead in discussion:
C. W. Roberts, Atlanta,
O. H. Weaver, Macon.
24. Intussusception,
W. A. Selman, Atlanta.
To lead in discussion:
C. Thompson, Millen,
W. H. Clark, LaGrange.
25. Infantile Eczema—Some of the Causes and Treatment,
Benjamin Bashinski, Macon.
To lead in discussion:
F. P. Norman, Columbus,
E. N. Gleaton, Savannah.
Address—Clifford G. Grulee, Chicago, Professor of Pediatrics, Rush Medical College, Chicago, Invited guest of the Association.
26. Basal Metabolism in Normal Children from Six to Twelve Years of Age,
George F. Klugh, Atlanta.
To lead in discussion:
J. D. Gray, Augusta,
Joseph Yampolsky, Atlanta.
27. Complications Sometimes Overlooked in Diseases of Children,
R. E. McGill, Montezuma.
To lead in discussion:
R. C. Maddox, Rome
M. A. Clark, Macon.
28. Routine Circumcision at Birth,
Thos. Bolling Gay, Atlanta.
To lead in discussion:
C. L. Ayers, Toccoa,
W. E. Floyd, Statesboro.

FRIDAY, MAY 11, 9 A.M.

29. Chronic Infection of the Maxillary Sinuses and Its Relation to General Medicine,
William C. Warren, Jr., Atlanta.
To lead in discussion:
Geo. B. Smith, Rome,
W. H. Cabaniss, Athens.
30. New Phase of Treatment of Otitis Media,
Francis B. Blackmar, Columbus.
To lead in discussion:
G. T. Olmstead, Savannah,
T. E. Oertel, Augusta.
31. Foreign Bodies in Food and Air Passages,
Murdock Equen, Atlanta,

To lead in discussion:

J. F. Chisholm, Savannah.

I. W. Irvin, Albany.

32. The Surgical Treatment of Pulmonary Tuberculosis,

Hugh N. Page, Augusta.

To lead in discussion:

T. C. Davison, Atlanta.

C. W. Crane, Augusta.

33. A Review of 228 Cases of Cancer of the Uterine Cervix,

John F. Denton, Atlanta,

Calvin B. Stewart, Atlanta.

To lead in discussion:

W. H. Goodrich, Augusta.

C. H. Richardson, Macon.

34. A Type of Pneumonia of Frequent Occurrence, and Often the Cause of Sudden Death—Report of Cases,

Edgar R. Pund, Augusta,

To lead in discussion:

E. C. Thrash, Atlanta,

E. W. Glidden, Alto.

35. Present Interpretation of Urticaria,

Cosby Swanson, Atlanta,

To lead in discussion:

G. T. Bernard, Augusta,

J. W. Simmons, Brunswick.

ALTERNATES

1. Duodenal Diverticula—Report of Two Cases,
Robert C. Pendergrass, Americus.

2. A New Method of Circumcision—Improved Technique for Better Plastic Results.

Samuel J. Sinkoe, Atlanta.

J. B. Arteaga, Atlanta.

3. Conservatism in the Care of Urological Cases,
S. A. Kirkland, Atlanta.

ELECTION OF OFFICERS

President.

First Vice-President.

Second Vice-President.

Delegates to A. M. A.

Councilors for the Fifth, Sixth, Seventh and Eighth Districts.

Selection of Meeting Place for 1929.

MISCELLANEOUS

CONSTITUTION AND BY-LAWS

Section 1. No address or paper before the Association shall occupy more than fifteen minutes in its delivery; and no member shall speak longer than five minutes, nor more than once on any one subject, except by unanimous consent.

Section 2. All papers read before the Association, or any of the sections, shall become its property. Each paper shall be deposited with the Secretary when read.

Section 3. The deliberations of this Association shall be governed by parliamentary usage as contained in Roberts' Rules of Order, when not in conflict with its Constitution and By-Laws.

No miscellaneous or business matters will be discussed before the scientific session, but will be referred to the House of Delegates.

RESOLUTION ADOPTED 1921

Resolved, That a member who sends in a title of a paper to be placed on the program and is not present to read the paper shall pay the penalty of not having an opportunity to appear on the program for two years, unless he presents an excuse acceptable to the Committee on Scientific Work.

V. P. SYDENSTRICKER, *Chairman*,

FRANK K. BOLAND,

ALLEN H. BUNCE,

Committee on Scientific Work.

District and County Societies

1928 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 20, 1927.

2. Turner County, Dr. J. H. Baxter, Ashburn, November 15, 1927.

3. Terrell County, Dr. Logan Thomas, Dawson, December 1, 1927.

4. Pike County, Dr. M. M. Head, Zebulon, December 3, 1927.

5. Ben Hill County, Dr. L. S. Osborne, Fitzgerald, December 8, 1927.

6. Evans County, Dr. S. T. Ellis, Claxton, December 29, 1927.

7. Taylor County, Dr. J. C. Hind, Reynolds, January 3, 1928.

8. Jasper County, Dr. E. M. Lancaster, Shady Dale, January 6, 1928.

9. Talbot County, Dr. C. C. Carson, Talbotton, January 28, 1928.

10. Wayne County, Dr. M. N. Stow, Jesup, February 9, 1928.

11. Lamar County, Dr. Jno. M. Anderson, Barnesville, March 6, 1928.

12. Terrell County, Dr. Logan Thomas, Dawson, March 7, 1928.

13. Stephens County, Dr. C. L. Ayers, Toocoa, March 8, 1928.

14. Crisp County, Dr. J. N. Dorminy, Cordele, April 5, 1928.

15. Henry County, Dr. H. C. Ellis, McDonough, April 10, 1928.

NEW MEMBERS FOR 1928

Acree, M. A., Calhoun
 Barfield, F. G., Jacksonville
 Barnett, W. R., Calhoun
 Beach, Asa, Atlanta
 Beddingfield, R. A., Cadwell
 Bond, Thos. W., Elberton
 Bridges, B. L., Thomaston
 Camp, J. A., Ochoopee
 Carter, George, Bluffton
 Cheney, R. L., Shellman
 Clark, Geo. S., Hartwell
 Durham, W. P., Sasser
 Eberhart, A. B., McDonough
 Edge, J. H., Tooeo
 Etheridge, I. H., Atlanta
 Funderburk, N. A., Trion
 Griffies, J. C., Burwell
 McCrummer, L. R., LaGrange
 Ragsdale, E. W., Tignall
 Ridley, F. M., LaGrange
 Saxon, T. S., Shellman
 Sharpe, H. C., Uvalda
 Sibbett, W. A., Douglas
 Smith, D. L., Cuthbert
 Smith, J. A., Lyerly
 Staples, J. H., Cuthbert
 Stovall, A. S. J., Elberton
 Taylor, H. W., Cuthbert
 Treuseh, H. L., Atlanta
 Vinson, S. L., Douglas
 Wade, A. C., Cuthbert
 Wade, W. J., Cuthbert
 Williams, Virgil, Grantville
 Wimberly, William, Ft. Gaines
 Witt, Marvin S., Manchester

NINTH DISTRICT MEETING

Ninth District Medical Society met at Canton on Wednesday, March 21, 1928, as the guest of the Cherokee County Doctors at Canton. Quite a large attendance was present, and an interesting program. Dr. B. B. Davis of Gainesville, the president, was in the chair. Rev. J. O. Pettis offered the invocation, Banker Elliott made the welcome address, and response was by Dr. C. L. Ayers.

Among the scientific discussions presented two touched on the matter of indigestion. Drs. L. C. Allen and L. G. Neal. Dr. C. J. Wellborn, Hall County Health Officer discussed Public Health Work. Dr. George M. Niles, the irresistible, discussed Non-Surgical Gall Bladder Drainage. Dr. Giles S. Kelly of Lawrenceville, who died in December last, was memorialized in a paper presented by the Secretary. Dr. Stewart R. Roberts, assisted by Dr. Vernon E. Powell, held a clinic, showing some cases of rheumatism and heart disease. This proved an interesting feature of the meeting.

After the program was completed luncheon was served, and it was satisfying. A rising vote of thanks was passed. Election of officers for the ensuing year resulted in the election of Dr. Grady N. Coker for president, and Dr. C. L. Ayers vice-president. Dr. Ayers, who is also our Councilor, called attention of the society to the action of the last state convention appointing a committee to write the medical history of Georgia, Dr. E. C. Thrash, chairman, and asked hearty co-operation in the premises. The discovery of ether anesthesia was first made by a Ninth District doctor, Crawford W. Long.

It was agreed that if Gainesville would invite the 1929 session of The Georgia Medical Association, that the entire district would act as host. Gainesville also named as the place for our district meeting next September.

The Ladies' Auxiliary also met, but we are not advised as to what they did.

Quite a bunch took a trip to Tate, Ga., to see the Marble Works, and other attractive things of that mountain section.

Dr. Thomas F. Abercrombie had been requested to represent the State Board of Health, but he sent a telegram expressing his regrets that he could not be present on account of illness.

JESSE C. BENNETT, M.D., *Secretary*,
 Jefferson, Ga.

COUNTY SOCIETIES REPORTING FOR 1928

COFFEE COUNTY MEDICAL SOCIETY

Coffee County Medical Society announces the following officers for 1928:

President—S. L. Vinson, Douglas.
 Vice-President—A. S. M. Coleman, Douglas.
 Secretary-Treasurer—T. H. Clark, Douglas.
 Delegate—S. L. Vinson, Douglas.
 Censors—W. A. Sibbett and John R. Smith.

WILKES COUNTY MEDICAL SOCIETY

Wilkes County Medical Society announces the following officers for 1928:

President—O. S. Wood, Washington.
 Vice-President—E. W. Ragsdale, Tignall.
 Secretary-Treasurer—H. T. Harriss, Washington.
 Delegate—T. C. Clodfelter, Tignall.
 Censors—L. R. Casteel, R. J. McNeil and C. E. Wills.

CARROLL COUNTY MEDICAL SOCIETY

Carroll County Medical Society announces the following officers for 1928:

President—D. S. Reese, Carrollton.
 Vice-President—E. G. Kirby, Bowdon.
 Secretary-Treasurer—H. J. Goodwyn, Carrollton.
 Delegate—C. L. Baskin, Temple.
 Censors—W. P. Smith and C. C. Fitts.

MACON COUNTY MEDICAL SOCIETY

Macon County Medical Society announces the following officers for 1928:

President—C. A. Greer, Oglethorpe.
Vice-President—G. W. Nelson, Marshallville.
Secretary-Treasurer—C. P. Savage, Montezuma.
Delegate—D. B. Frederick, Marshallville.
Censors—H. C. Derrick, R. E. McGill and F. M. Mullino.

DEKALB COUNTY MEDICAL SOCIETY

DeKalb County Medical Society announces the following officers for 1928:

President—J. R. Evans, Decatur.
Vice-President—C. L. Allgood, Scottdale.
Secretary-Treasurer—B. V. Wilson, Decatur.
Delegate—W. S. Ansley, Decatur.

UPSON COUNTY MEDICAL SOCIETY

Upton County Medical Society announces the following officers for 1928:

President—C. A. Harris, The Rock.
Vice-President—E. W. Carter, Thomaston.
Secretary-Treasurer—R. L. Carter, Thomaston.
Delegate—B. C. Adams, Thomaston.
Censors—K. S. Williams, C. A. Harris and F. M. Woodall.

TOOMBS COUNTY MEDICAL SOCIETY

Toombs County Medical Society announces the following officers for 1928:

President—I. E. Aaron, Lyons.
Secretary-Treasurer—W. W. Odom, Lyons.

STEPHENS COUNTY MEDICAL SOCIETY

Stephens County Medical Society announces the following officers for 1928:

President—E. F. Chaffin, Toccoa.
Vice-President—W. H. Swain, Martin.
Secretary-Treasurer—C. L. Ayers, Toccoa.
Delegate—J. H. Terrell, Toccoa.
Censors—E. F. Chaffin, J. E. D. Isbell and W. H. Swain.

BLUE RIDGE MEDICAL SOCIETY

Blue Ridge Medical Society announces the following officers for 1928:

President—J. M. Daves, Blue Ridge.
Vice President—N. C. Goss, Ellijay.
Secretary-Treasurer—C. B. Crawford, Blue Ridge.
Delegate—E. L. Prince, Morganton.
Censors—E. L. Prince, N. C. Goss and C. B. Crawford.

JENKINS COUNTY MEDICAL SOCIETY

Jenkins County Medical Society announces the following officers for 1928:

President—M. E. Perkins, Millen.
Vice-President—Q. A. Mulkey, Millen.
Secretary-Treasurer—C. Thompson, Millen.
Delegate—C. Thompson, Millen.

JONES COUNTY MEDICAL SOCIETY

Jones County Medical Society announces the following officers for 1928:

President—W. J. Waits, Gray.

Secretary-Treasurer—J. D. Zachary, Gray.

LAURENS COUNTY MEDICAL SOCIETY

Laurens County Medical Society announces the following officers for 1928:

President—J. E. New, Dexter.
Vice-President—D. L. Murray, Dexter.
Secretary-Treasurer—O. H. Cheek, Dublin.
Delegate—E. B. Claxton, Dublin.

HART COUNTY MEDICAL SOCIETY

Hart County Medical Society announces the following officers for 1928:

President—G. T. Harper, Dewyrose.
Vice-President—A. O. Meredith, Hartwell.
Secretary-Treasurer—W. E. McCurry, Hartwell.
Delegate—G. T. Harper, Dewyrose.

MONTGOMERY COUNTY MEDICAL SOCIETY

Montgomery County Medical Society announces the following officers for 1928:

President—H. C. Sharpe, Uvalda.
Vice-President—J. H. Dees, Alston.
Secretary-Treasurer—J. E. Hunt, Mt. Vernon.
Delegate—W. M. Moses, Uvalda.

CHATTOOGA COUNTY MEDICAL SOCIETY

Chattooga County Medical Society announces the following officers for 1928:

President—G. F. Martin, Menlo.
Vice-President—R. E. Talley, Trion.
Secretary-Treasurer—H. D. Brown, Summer-ville.
Delegate—B. F. Shamblin, Lyerly.
Censor—M. N. Wood, Menlo.

CAMPBELL COUNTY MEDICAL SOCIETY

Campbell County Medical Society announces the following officers for 1928:

President—T. P. Bullard, Palmetto.
Vice-President—W. R. Camp, Fairburn.
Secretary-Treasurer—A. J. Green, Union City.
Delegate—R. T. Camp, Fairburn.

SPIROCHETAL JAUNDICE

In the eighth proved case of *Leptospira ictero-hemorrhagiae* reported in the United States, the symptoms, including the usual relapse, were characteristic of this disease. The mode of infection could not be determined. H. B. Mulholland and W. E. Bray University, Va. (Journal A. M. A., April 7, 1928), state that jaundice with high fever, prostration, muscular pains, nosebleed or hemorrhage with lymphocytosis and many large lymphocytes should make one suspect Weil's disease. The diagnosis can be made in the early stages by inoculating a guinea-pig with the patient's blood. The authors agree with numerous other writers that mild jaundice, as seen in epidemics, particularly prevalent in institutions, is probably not of this type, for injections of blood into the guinea-pig from a number of such cases have given entirely negative results. However, the case conforms with the others reported in that it was an isolated instance of the infection.

Georgia State Nurses' Association

OFFICERS

| | |
|---|---|
| President.....Miss Annie Bess Feebeck, R.N. Grady Memorial Hospital, Atlanta | |
| 1st Vice-President.....Miss E. Alma Brown, R.N. University Hospital, Augusta | 2nd Vice-President.....Miss Jessie Veazey, R.N. St. Andrews Apt., Atlanta |
| Secretary.....Mrs. Alma E. Albrecht, R.N. Georgia Infirmary, Savannah | Treasurer.....Miss Jane Van De Vrede, R.N. 105 Forrest Ave., N.E., Atlanta |

A MESSAGE FROM THE PRESIDENT OF THE GEORGIA LEAGUE OF NURSING EDUCATION

Although there has always been a committee or a section in the Georgia State Nurses' Association to whom the advancement in nursing education has been entrusted, it is less than a year since the Georgia League of Nursing Education came into existence; and by action of the State Association became the permanent committee on Nursing Education of that body.

The objects of the League are, to help all those who desire information regarding the education of the student nurse and the betterment of nursing conditions in all its phases; by bringing together those who are responsible for the education of the student nurse; by stimulating greater interest in questions of public welfare, and by making every effort to bring about more cordial relations with the public, with the medical profession and among ourselves.

Health is one of the greatest of our national assets; and securing of health is, therefore, an essential public concern. We have a considerable scientific knowledge which, if intelligently and fully applied, would greatly reduce sickness and prolong human life. Yet this very process of applying the knowledge which we have depends upon education; and that education rests largely in the hands of the two great bodies of health teachers, doctors and nurses. The lack of public support and understanding works a hardship upon the student nurse.

When the subject of the education of the student nurse is even mentioned, the trend is to presuppose that the large or university schools only are to be considered, and that in the effort to promote better teaching, the small institution must pass into oblivion. That the very small hospital is necessary to the community in which it is located cannot be denied. In many ways its importance is out of proportion to its size. Not only is it important from the standpoint of the physician, and the patient, but it dominates the thought

and action of the community in regard to nursing and nursing education.

In many of these hospitals it seems that the only way to care for the patients is by means of a school of nursing. When these schools find difficulties and seek advice, it is then that the League of Nursing Education will endeavor to see all sides of the situation and discuss the facts, the surroundings and possibilities, with those most vitally interested, giving them the benefit of the knowledge we have gleaned through our opportunities.

The question of affiliation for the students of the small schools has unfortunately been thought of as a requirement rather than a privilege extended to the small school, through a desire of the profession and the larger school, as a method of give and take, which renders advantages to both schools and most of all to the affiliating student in the interest of better care of the sick.

Nursing and nursing education is not a new project; indeed it is nearing its seventy-fifth anniversary. The anniversary of the grounding of the first school of nursing by Florence Nightingale; and true to all good principles the nursing profession is ever on the alert to improve its standards and keep pace with the advances in the medical profession to which it is so closely allied.

In our undertaking we appreciate and need the help of all those who are interested in or served by nurses. We have a debt, as Dr. John Finley calls it, "The Debt Eternal," which is the debt we owe to the next generation; it is the obligation we owe to those weaker than ourselves. "The harder we have worked, the more we have suffered to keep alive our ideals; the greater has been our success, or strange as it may seem, the greater our failure; so much heavier is our obligation to see to it that those following us and those around us may be benefited and helped onward by our efforts."

Any nurse in any way connected with educational work, public or institutional, and who is a member of the Georgia State Nurses' Association, is eligible to membership in the Georgia League of Nursing Education; and

we hope to enroll all Superintendents, Supervisors and Head Nurses in Georgia. The membership includes membership in the National League of Nursing Education, and brings each member a printed copy of the proceedings of each National Convention, free of charge.

EVA SMILLIE TUPMAN, R.N.,
President.

The Biennial

Of course you are not going to miss the Biennial! It is anticipated the 1928 Convention will be a memorable occasion, first, because the program is a very worthy one; and second, because features rather unusual will mark this convention.

For instance, it is said a horse race has been specially planned for the enjoyment of the nurses. Kentucky, always famous for its horses, as well as for its gracious hospitality, will stage a race at Churchill Downs on the last day of the Convention.

Then, there will be a garden party and a boat ride on the Ohio River.

From a historical standpoint it would have been difficult to have selected a more interesting city and state to meet in than Louisville and Kentucky. The log-cabin birthplace of Abraham Lincoln, the great Emancipator; of Jefferson Davis, Confederate leader; the home of Stephen Collins Foster, author of "My Old Kentucky Home;" not to speak of the tomb of Zachary Taylor, fourteenth president of the United States—are all accessible, being within a short distance of Louisville.

There are, in fact, many interesting and fascinating places in Kentucky of historic and scenic importance, and Convention members will have the opportunity of seeing many of them, thanks to the forethought of the Louisville committee on arrangements. Among the worth while sidetrips, if a sufficient number of nurses enroll for them, will be one to the *Bluegrass Region*, and includes a visit to Shakertown, home of the famous Shaker Colony; to the Palisades, along which the road runs for several miles above the Kentucky River; to Mammoth Cave, with its miles of entrancing underground passages, and to other points.

A Louisville nurse, with special preparation in guide duties, will take her place on each sightseeing bus instead of the customary trained guides. And last, but not least, especially to Southerners, is an old-fashioned chicken dinner—Southern style!

Exposition

The most ambitious exposition yet planned by nursing organizations will be featured this year. It will be thoroughly educational in character, although commercial, and the displays promise to be unusual, including books, classroom equipment, hospital equipment,

rubber goods, pharmaceuticals and uniforms. Insurance is to be featured by standard companies, and the Berea College of Kentucky, will show some of its distinctive products.

Resume

In short, the Louisville convention should prove one of the biggest, most interesting, and perhaps the gayest, from a social standpoint, in the history of the A. N. A., and you cannot afford to miss it. Make your summer vacation plans fit into attendance. The railroads are offering special inducements—one fare plus half fare, provided certificates, which should be asked for, are countersigned at the convention. Stop-over privileges are being featured by the various roads. Write Miss Flora E. Keen, Thierman Apt., C-1, 416 W. Breckenridge St., Louisville, for information regarding hotels and make your reservations at once!

Post Office Station in Armory

All mail to those attending the Biennial Convention should be addressed to Nurses' Convention, Jefferson County Armory, Louisville, Ky. Do not have mail sent to your hotel, but only to the address given above. The Post Office at Washington has arranged for a substation for Convention week, and this will greatly facilitate the handling of mail. It is asked that nurses adhere strictly to this advice, for their own sakes.

The American Journal of Nursing

At a time when the distribution of nursing service is a question of paramount importance in nurse circles, the articles in the April issue of *The American Journal of Nursing*, on Buffalo's official registry, is of absorbing interest. Originated by nurses, the registry has "the unqualified endorsement of the County Medical Society," and the favorable comment so often heard from individual doctors is most gratifying.

In Honor of Jane Delano, R.N.

On March 12th the Headquarters of the Georgia State Nurses' Association kept "Open House" to the Red Cross Nurses who, in memory of Jane A. Delano, beloved World War nurse, came to renew their allegiance to the American Red Cross.

The rooms were attractive with spring flowers and bowls of lovely red and white carnations and other flowers, and a large United States flag draped on the wall of the reception room add greatly to the impressiveness of the occasion.

Miss Lillian M. Alexander, chairman of the Local Red Cross Committee, and Miss Jean Harrell, secretary of the committee, were hostesses, and were graciously assisted by Miss Gail Maedonald, until recently connected with the National Headquarters of the A. R. C.

Many Red Cross Nurses called during the

(Continued on page 173)

Woman's Auxiliary Medical Association of Georgia

OFFICERS

| | | | |
|----------------------|---------------------------------|--------------------------------|--------------------------------|
| President..... | Mrs. Paul Holliday, Athens | President-Elect..... | Mrs. C. C. Hinton, Macon |
| 1st Vice-Pres..... | Mrs. Marion T. Benson, Atlanta | 2d Vice-Pres..... | Mrs. Wm. R. Dancy, Savannah |
| 3d Vice-Pres..... | Mrs. H. L. Rudolph, Gainesville | Cor. Sec..... | Mrs. Guy O. Welchel, Athens |
| Rec. Sec..... | Mrs. J. A. Selden, Macon | Treasurer..... | Mrs. Steward D. Brown, Royston |
| Parliamentarian..... | | Mrs. James N. Brawner, Atlanta | |

Delegates to A. M. A.

| | | | |
|-------------------------|---------|--------------------------|--------|
| Mrs. C. W. Roberts..... | Atlanta | Mrs. H. M. Fulllove..... | Athens |
|-------------------------|---------|--------------------------|--------|

Delegates to S. M. A.

| | | | |
|--------------------------|-------------|---------------------------|---------|
| Mrs. T. L. Holcombe..... | Union Point | Mrs. Frank K. Boland..... | Atlanta |
|--------------------------|-------------|---------------------------|---------|

Alternates

| | | | |
|-----------------------|---------|--------------------------|---------|
| Mrs. Dan Y. Sage..... | Atlanta | Mrs. Chas. E. Walts..... | Atlanta |
|-----------------------|---------|--------------------------|---------|

INVITATIONS

To the Officers and Members of the Woman's Auxiliary:

We extend a cordial and urgent invitation to the ladies of the State Auxiliary to come to the Fourth Annual Meeting of the Woman's Auxiliary to the Medical Association of Georgia to be held at Savannah May 9, 10, 11, 1928.

Respectfully,

MRS. RALSTON LATTIMORE, *President*,
Woman's Auxiliary to the
Georgia Medical Society.

Savannah, Ga.

Savannah is anticipating with the greatest pleasure, the Fourth Annual Meeting of the Woman's Auxiliary to the Medical Association of Georgia.

We shall endeavor to make this convention one of joy and inspiration, and to demonstrate the affectionate regards we have for the physicians of Georgia and their wives.

A cordial and pressing invitation is extended to each and every one.

Respectfully,

MRS. WM. H. MYERS, *Chairman*,
Program and Entertainment Committee.
Savannah, Ga.

PROGRAM WOMAN'S AUXILIARY

The Fourth Annual Meeting of the Woman's Auxiliary to the Medical Association of Georgia to be held at Savannah, May 9, 10, 11, 1928.

TUESDAY, MAY 8

Registration—Hotel DeSoto, Headquarters.

WEDNESDAY, MAY 9

9 to 10:30 A.M.

Health Examinations—Hotel DeSoto.

10:45 A.M.

Meeting of Executive Board and Delegates at the Huntingdon Club, 3 West Perry St.

WEDNESDAY, MAY 9

1:30 P.M.

Luncheon, Hotel DeSoto, in honor of the officers of the state, delegates and guests.

4:30 P.M.

Drive, starting from Hotel DeSoto.

6:00 P.M.

Dr. and Mrs. John S. Howkins, Jr., 720 Drayton St., will entertain with afternoon tea in honor of the Woman's Auxiliary and the Medical Association.

Report of District Managers.

THURSDAY, MAY 10

9:00 to 10:30 A.M.

Health Examinations.

10:30 A.M.

General meeting at the Huntingdon Club.

Invocation by Dr. Neal L. Anderson.

Address of Welcome by Miss Phoebe Elliott, President, Huntingdon Club.

Address of Welcome by Mrs. Ralston Lattimore, President, Woman's Auxiliary to the Georgia Medical Society.

Response to Address of Welcome by Mrs. J. Cox Wall, Eastman, of Twelfth District.

Minutes of Last Annual Meeting.

Address: "As a Woman Thinketh," by Dr. Stewart R. Roberts, Atlanta.

Report of Officers.

Report of Committees.

Election of Officers.

Unfinished Business.

(Continued on page 177)

Georgia Tuberculosis Association

OFFICERS AND STAFF

| | | | |
|-------------------|---------------------------------|--------------------------------|---------------------------------|
| President..... | E. W. Glidden, M.D., Alto | Treasurer..... | T. K. Glenn, Atlanta |
| 1st Vice-Pres.... | Lee M. Happ, Macon | Managing Director..... | Jas. P. Faulkner, Atlanta |
| 2nd Vice-Pres.... | I. A. White, D.D., Cartersville | Health Education Director..... | Miss Mildred S. Manson, Atlanta |
| Secretary..... | Miss Virginia Gibbes, Marietta | Office Secretary..... | Miss Julia Bone, Atlanta |

4 Capitol Square, S. M. Atlanta, Ga.

ADVISORY MEDICAL COMMITTEE

| | | | |
|-------------------------|---------|-------------------------------|---------|
| E. C. Thrash, M.D. | Atlanta | J. H. Bradfield, M.D. | Atlanta |
| Z. S. Cowan, M.D. | Atlanta | Allen H. Bunce, M.D. | Atlanta |
| C. C. Aven, M.D. | Atlanta | Stewart R. Roberts, M.D. | Atlanta |

CO-OPERATION IN THE EARLY DIAGNOSIS CAMPAIGN

The Early Diagnosis Campaign, a national movement initiated in March by the tuberculosis associations, has met with such success that the committee responsible for the program is already planning a similar movement to emphasize certain phases in the fight on tuberculosis in 1929, and probably in succeeding years.

In many states, the local associations and committees have asked the privilege of continuing the Early Diagnosis Campaign through April, May, and June, and have expressed determination to keep this important feature of the fight continually in the front.

The Georgia Tuberculosis Association has more than a hundred local associations and representative committees and most of these have taken and distributed the literature or will do so during April and May. The County Health officers have also responded splendidly and are using the posters, circulars and moving picture reels, making the campaign theirs.

In the March number of the Journal, as a part of the Early Diagnosis Campaign, this department was established for the purpose of carrying the news of the campaign and presenting articles on the chief phases of the program. The article in the March Journal was entitled "The Private Physician in the Control of Tuberculosis." The second in the series discusses the sources of infection. It follows:

SOURCES OF INFECTION IN TUBERCULOSIS

There are two types of tuberculous infection in man. One is caused by the bovine tubercle bacillus, and the other by the human

type. In the United States, it is estimated that about six to eight per cent of all tuberculosis is bovine in origin. It is a safe estimate, therefore, that at least ninety per cent of all tuberculosis in this country is from human sources. In the British Isles and on the Continent of Europe the bovine type of infection is apparently more prevalent, the estimates ranging from 18% in one country to 35% in another.

The open ease of pulmonary tuberculosis is the great disseminator of infection. Approximately one of every hundred individuals has a positive sputum. Autopsies have shown that approximately one in five have, or have had, ulcerative tuberculosis of the lungs. Human sputum, therefore, demands our closest attention for bacteriological examination and for our control of tuberculous infection. Tubercle bacilli may be swallowed, or they may be inhaled through droplets or dust. Tuberculous ulcers and stools play a minor role in the dissemination of the disease.

The frequency of bovine infection in man can be explained if we consider the number of cattle that have tuberculosis and the frequency of tubercle bacilli in market milk. In France, Calmette was able to demonstrate with tuberculin reactions that the cattle of France, depending upon their age, reacted as high as forty-five per cent. The presence of tuberculosis among dairy cattle is higher than among animals slaughtered for beef. About one per cent of meat cattle has tuberculosis. It has been variously estimated in this country that the proportion of animals reacting to the tuberculin test ranges from none, in herds which have been subjected to the test for several years, to thirty per cent and over, in

herds in which no attempt has been made to control the disease. Tuberculosis of the udder is the most dangerous type in cattle. In the United States this type has been estimated to exist in ten to thirty per cent of all dairy cattle. Milk from such udders may contain from fifty thousand to one hundred thousand tubercle bacilli per cubic centimeter, and this milk is found to be infectious for guinea pigs when injected in high dilutions.

Tubercle bacilli have been found in market milk, which represents the mixed milk of many cattle, in many large cities. In the United States the bacilli have been found in from 6% to 16% of samples examined. In European cities the range was from 10% to 27%.

The importance of the sources of infection in tuberculosis is obvious. Human sputum is responsible for approximately nine-tenths of the disease and the failure to control milk the other tenth. Children are particularly liable to the bovine types of tuberculosis because milk forms the bulk of their food. All milk for human consumption should be pasteurized, and all milk for infant feeding should come from tested herds, or be boiled. The argument that the boiling of milk and the pasteurization of milk destroys vitamins is a weak one. In adults the vitamins are furnished mainly by other foods. In infants the antiscorbutic vitamins can be replaced with simple fruit juices, and the antirachitic vitamins by cod liver oil.

NURSES' DEPARTMENT

(Continued from page 172)

day to file their questionnaires. During the afternoon Miss Alexander read "At Savanay," Herbert S. Gorman's beautiful poem, in an impressive manner. Punch was served.

Second District Meeting

The Second District organization convened in Augusta on March 12th at the Woman's Club, having as guests the junior class of the training school of University Hospital and the senior class of the Margaret Wright training school. A lecture by Dr. R. L. Harris of the U. S. V. Bureau was greatly enjoyed. Business of importance, including the naming of delegates to the Biennial, was dispatched.

First District Organization

The First District organization of the G. S. N. A. held its February meeting on the 17th

of that month in the Headquarters' office, with Miss Cora E. Byers, president, presiding. Mrs. Sue M. Paille is secretary of this district.

In spite of the very inclement weather there was a good attendance and applications from 8 new members were received. Talks were made by Miss Jessie M. Candlish, president of the State Board of Examiners of Nurses, and superintendent of the new children's hospital, and by Miss Lillian M. Alexander, director of public health nursing service, city of Atlanta.

Reports of chairmen indicated activity in most committees of the District. Miss Celia Johnson, chairman of the Education committee, reported regular meetings of that group.

As Chairman of the public health section, Miss Alexander reported regular meetings the first Monday in each month at 4 o'clock in the hospital room at Rich's department store, Atlanta, with the public cordially invited to be present.

Nurses Aid Tallulah Falls School

The co-operation of the nurses of this District was asked by the Junior Red Cross, which is planning a benefit entertainment for the Tallulah Falls school for mountain boys and girls, which has been the recipient of annual contributions by nurses of the G. S. N. A. for a number of years. This school, in the heart of the Appalachian mountains of north-west Georgia—called by many "The Little Switzerland of America," because of its rare scenic beauty—is owned and operated by the State Federation of Women's Clubs, and is furnishing an opportunity to many mountain mountain boys and girls for educational and vocational development. Its aim is to give leaders to that section of the state, and to furnish to these sturdy young Americans a clear picture of their "duty to God and home and native land."

EPIDURAL CAUDAL ANESTHESIA IN PROSTATIC SURGERY

Hugh H. Young, Baltimore (Journal A. M. A., March 31, 1928), believes that epidural sacral anesthesia with 3 per cent procaine hydrochloride is the anesthetic of choice in prostatic and other perineal surgery. It is particularly valuable in the very aged, in cases of high blood pressure, and in the presence of cardiac lesions, renal impairment and respiratory infections. The relaxation obtained and the freedom from hemorrhage is much better than with a general anesthetic, and the ability of the patient to drink water in abundance immediately after the operation is a distinct advantage. The few failures are not a contra-indication.

DEPARTMENT of BOOK REVIEWS AND ABSTRACTS

Mark S. Dougherty, M. D.
Department Editor

GONOCOCCUS SEPTICEMIA

Drs. Thomas J. O'Brien and Evert A. Bancker, Jr., in the *New England Journal of Medicine* of March 15, 1928, report a case of gonococcus septicemia which recovered without a cardiac complication. This is the first case of gonococcus septicemia reported which recovered without showing evidence of a cardiac lesion. The case is that of a white, male patient 20 years of age who entered the hospital with chief complaints of a urethral discharge, sore throat, generalized joint pains and a pustular rash on the neck, arms and legs. He had contracted gonorrhea three months before and had not been treated. The patient remained in the hospital for four months running a daily septic temperature ranging from 97° to 104° or above. Many urethral smears were positive for the gonococcus and the blood culture was positive for the gonococcus over a period of approximately three months. At no time was there any evidence of cardiac involvement save for a systolic murmur which persisted for only two weeks. The treatment consisted of routine local treatment, antigonococcus serum, stock and autogenous vaccines and sodium cacodylate and mercurochrome intravenously. These various methods of treatment were disappointing and the patient showed marked improvement only as the urethritis disappeared.

SUBACUTE COMBINED SCLEROSIS

Report of a case, associated with pernicious anemia, improved by Murphy-Minot diet. Howard M. Bubert, M.D., Baltimore. *Jour. A. M. A.*, March 24, 1928.

Dr. Bubert reports a case of combined sclerosis associated with pernicious anemia that has been under observation for nearly five years and has shown definite improvement upon the liver diet as outlined by Murphy and Minot. He was first seen in 1923 and all the recognized methods of treatment were tried upon him. However, except for short periods of remission his course was progressively downward. He received two transfusions during this period of time. In 1925 he presented very clear cut evidence of involvement of the central nervous system. This was evidenced by numbness and tingling of the extremities, absent knee kicks, marked ataxia and a positive Romberg's sign. Mentally he was depressed, irritable and his memory was failing. He also showed impairment in his visual acuity. In August of 1926 he was placed on the liver diet as outlined by Murphy and Minot. During about nine months of this

treatment his improvement was phenomenal. The blood picture returned to normal and he gained back to his usual weight. At the end of nine months' treatment he was working regularly. The knee kicks had returned practically to normal and Romberg's sign had been reduced to a simple swaying with the eyes closed. The gait was no longer disturbed, the patient rarely needing the cane he carried.

BOOK REVIEW

Practical Therapeutics by Hobart Amory Hare, B.Sc., M.D., LL.D., Professor of Therapeutics, Materia Medica and Diagnosis in the Jefferson Medical College of Philadelphia. Physician to the Jefferson Medical College Hospital. Twentieth Edition; pages, 1094; illustrations, 166. Lea & Febiger, Philadelphia. 1927. Price, \$7.50.

The popularity of this book is attested to by the fact that this is the twentieth edition published. As the title indicates the book is of a practical nature and all the information it contains is presented in such a way that it can be used at once. The book is divided into four parts. Part I. General therapeutic considerations. This section deals with the elementary considerations of pharmacology and materia medica. Part II. Drugs. This section deals with the individual drugs giving the pharmacologic actions, dosages and indications for the practical use of the drug. Part III. Remedial measures other than drugs. This section deals with such things as feeding the sick. Part IV. Here the therapeutic treatment of individual diseases is presented together with general advice as to the management of the disease.

As stated in the preface not many new drugs or remedies have been added since the last edition. However, the knowledge concerning the drugs in common use has been brought up to date. The fact that old arsphenamine is to be preferred to any arsenic substitutes in the treatment of syphilis is brought out. The status of bismuth preparations in the treatment of the later stages of syphilis is discussed. The value of novasurol with ammonium chloride in the treatment of cases of cardiac dropsy is referred to. New drugs such as metaphen ephedrin and isacen are mentioned.

The book is well written and very readable. On page 208 the word permitted is spelled permitted and on page 332 the word glycogen is spelled glycogen. These are evidently errors in printing. On page 499 the word contraindication is used where clearly the word contradiction was intended. How-

ever, these errors do not detract from the mass of useful information that is presented in the book.

The book is recommended and every general practitioner of medicine would do well to have it in his office for reference.

MARK S. DOUGHERTY, M.D.

Physical Diagnosis by Charles Phillips Emerson, A.B., M.D., Professor of Medicine, Indiana University School of Medicine; Author of *Clinical Diagnosis*. Pages, 530; illustrations, 324. J. B. Lippincott Company, Philadelphia. 1928.

This book should appeal at once to the young as well as the old and experienced student of medicine. The index is most efficiently arranged in a systematic and unusual manner, making it very easy to locate the subject heads.

The general introduction defines physical diagnosis, physical signs and symptoms and points out that after all, the history of medicine is the history of physical diagnosis. The introduction also contains an excellent history of medicine which puts the reader in an enthusiastic frame of mind for the body of the text. The introduction which is also the first chapters, covers 14 pages.

The subject matter is very up-to-date and the definitions and discussions are clear and not too full.

The illustrations are photographic and diagrammatic and stand out plainly leaving no doubt as to the examples portrayed.

Unlike most books on physical diagnosis this book deals fully with other parts of the body besides the heart and lungs.

Some portions of the text are in fine print to make the discussion complete.

I would like to recommend this book most highly to the medical profession.

E. A. BANCKER, M.D.

Basal Metabolism in Health and Disease by Eugene F. DuBois, M.D., Medical Director, Russell Sage Institute of Pathology, Associate Professor of Medicine, Cornell University Medical College, New York. Second Edition; 431 pages. Lea & Febiger, Philadelphia. 1927.

This is a well written book, with good illustrations, presenting a vast amount of information clearly and concisely. It begins with a history of metabolism, summarizing the work of other investigators in this field and reflects the wide experience of the author as a research worker and clinician. The chapters relating to the clinical application of the basal metabolism tests are wisely conservative and, if their advice is followed, will save the clinician from the pitfalls of over enthusiasm and undue dependence on laboratory tests alone without the support of clinical evidence. It is a valuable reference book dealing with all phases of metabolism, suitable alike for student and clinician.

GEORGE F. KLUGH, M.D.

BOOKS RECEIVED

Treatment of Diseases in Infants and Children by Hans Kleinschmidt, M.D., Professor of Pediatrics, University of Hamburg, Authorized translation of the Fifth German Edition with additions by Harry M. Greenwald, M.D., attending physician to the United Israel Zion Hospital; consulting physician to the Hebrew Infant Home of Brooklyn, Brooklyn, New York. Price \$5.00. Publishers: P. Blakiston's Son & Company, 1012 Walnut Street, Philadelphia, Pennsylvania.

Practice of Medicine, A Manual for Students and Practitioners by Hughes Dayton, M.D., Irvington-on-Hudson, New York, attending physician to the Grasslands and Tarrytown Hospitals; consulting physician to the United Hospital, Portchester, New York. Fifth Revised Edition. Publishers: Lea & Febiger, 600 South Washington Square, Philadelphia, Pennsylvania.

An Elementary Text Book of General Microbiology by Ward Giltner, Professor of Bacteriology and Hygiene, Michigan State College; 99 illustrations. Publishers: P. Blakiston's Son & Company, 1012 Walnut Street, Philadelphia, Pennsylvania. Price \$3.50 net.

Aluminum Compounds in Food including a digest of the report of the referee board of scientific experts on the influence of aluminum compounds on the nutrition and health of man by Ernest Ellsworth Smith, Ph.D., M.D., fellow and former president, New York Academy of Sciences; fellow of the New York Academy of Medicine. Publishers: Paul B. Hoeber, Inc., 76 Fifth Avenue, New York City.

Pharmacotherapeutics Materia Medica and Drug Action by Solomon Solis-Cohen, M.D., and Thomas Stotesbury Githens, M.D. Contains 2009 pages. Publishers: D. Appleton and Company, 35 West 32nd Street, New York City.

WOMAN'S AUXILIARY PROGRAM

(Continued from page 173)

New Business.

Adjournment.

THURSDAY, MAY 10

4 to 5 P.M.

Visit to the Telfair Academy of Arts.

8 P.M.

Banquet and dance at the General Oglethorpe Hotel.

FRIDAY, MAY 11

9 to 10:30 A.M.

Health Examinations, Hotel DeSoto.

10:40 A.M.

Executive Board Meeting of New Officers.

COMMITTEE ON ARRANGEMENTS

Mrs. Wm. H. Myers, Chairman.

Mrs. Ralston Lattimore.

Mrs. Wm. R. Daney.

Brain and Brawn or the Nervous System of Man by R. J. A. Berry, M.D., Dean of the faculty of medicine and professor of anatomy, including histology, in the University of Melbourne; honorary psychiatrist to the Children's Hospital, Melbourne, and consulting psychiatrist to the Children's Welfare Department of the Government of Victoria; formerly lecturer on anatomy in the School of Medicine of the Royal Colleges, Edinburgh. Contains 608 pages. Publishers: The Macmillan Company, 60 Fifth Avenue, New York City.

COMMUNICATIONS

To the Editor:

At the Washington Session, the Reference Committee on Reports of Officers offered the suggestion that it would be desirable if the constituent state associations could appoint delegates so that a complete list of the representatives of each constituent association might be in the hands of the Secretary of the American Medical Association at least thirty days before the annual session. The House of Delegates adopted this part of the report of the reference committee, and I, as Secretary, was thereby instructed to communicate with the constituent state associations accordingly.

The suggestion of the reference committee grew out of a statement contained in the address of the Speaker of the House of Delegates. The Speaker expressed a desire to give all constituent state associations, as far as possible, representation on the working committees of the House of Delegates. This has not been altogether possible heretofore because in some instances delegates have been elected by constituent state associations less than ten days before the time of our annual session.

If, under the constitution and by-laws of your constituent state association, it is possible to have delegates appointed and reported to this office at least thirty days before our annual session, the Speaker of the House of Delegates will then be in position to make a wider selection of members of reference committees and special committees of the House.

Very truly yours,

OLIN WEST, M.D.,
Secretary, A. M. A.

Chicago, March 8, 1928.

To the Editor:

Through the generosity of the Commonwealth Fund, the Southern Pediatric Seminar is able to offer a limited number of scholarships to physicians in our states.

The Southern Pediatric Seminar is a post-graduate course of two weeks in the care and feeding of children. This scholarship carries with it all expenses for the two weeks' stay at Saluda, N. C.

Any physician in your State is eligible for appointment but we prefer giving them to men over thirty-five years of age, in general practice, and in towns of under 2,000 inhabitants. Any one interested in receiving this scholarship will communicate with me. The Seminar begins on July 23 and ends August 4th.

Yours very sincerely,

D. LESESNE SMITH, M.D.,
Registrar.

Spartanburg, S. C., March 17, 1928.

To the Editor:

Permit me to acknowledge your letter of the twenty-third instant with reference to amendment to the Revenue Act introduced by Senator Robinson.

In my opinion, expenses incurred by a physician while attending a clinic or medical association should be listed as a deductible expense. As a member of the Finance Committee of the Senate, I shall urge that this item be included.

Thanking you for your letter, I am, with all good wishes,

Sincerely yours,

WALTER F. GEORGE, *Senator*.
Washington, March 26, 1928.

To the Editor:

Chronic infectious arthritis is the bane of many individuals, especially stout, elderly females. The removal of diseased tonsils, diseased teeth, the comparative cleaning up of the accessory sinuses and mastoids have in many instances produced good results; but in some the pain and joint-disability still persist.

The writer has had a series of forty-one cases, in every one of which all the accredited methods had been employed, and has used non-surgical gall-tract drainage three or more times with each of them. In every instance, where *three or more drainages* were practicable, there has apparently ensued some improvement. In those where quite a number of drainages were gone through with, the improvement has seemed more marked.

In advancing the claims for non-surgical gall-tract drainage, the writer does not advocate the omission of any of the recognized methods heretofore properly invoked; but does suggest this as an auxiliary for the amelioration of this most chronic and distressing infirmity. Furthermore, this procedure entails no danger, a moderate expense, and a minimum of effort and lost time to all concerned. If some of these stout old people, who constantly complain and repine over their stiff and painful joints, could have their infected gall-tracts thoroughly and perseveringly drained, the relief attained would in most instances be gratifying in the extreme.

NILES.

To the Editor:

In order to promote medical research and writing in Atlanta, and more particularly among the members of the Davis-Fischer Sanatorium Staff, I am pleased to inform you that Dr. W. M. Dunn (as an evidence of appreciation of what the Davis-Fischer Sanatorium has done and meant to the younger men of the profession of Atlanta, he states), has offered a prize of \$50.00, and Dr. L. C. Fischer a prize of \$100.00. These prizes are to be given to that member of the Davis-Fischer Sanatorium Staff whose presentation before that body shows the most original research and the most carefully prepared article.

Drs. E. Bates Block, Allen H. Bunce and E. C. Davis, will act as judges and it will be necessary that each presentation be in writing and same be handed to the Secretary at the time of presentation. Any presentation of a medical nature is eligible and will be considered by the judges.

Every member of the Staff is eligible for these prizes and the programs will be made of titles submitted by you. The Program Committee is very anxious that you in turn in your title immediately so that the programs may be arranged. Kindly submit your title addressed to the Program Committee, Davis-Fischer Sanatorium Staff, 35 Linden Ave., N.E., Atlanta Ga.

M. T. HARBISON, *Secretary*,
Davis-Fischer Sanatorium Staff.

Atlanta, March 16, 1928.

HOSPITAL SERVICE IN GEORGIA

To the Editor:

Because the special Hospital Number of the Journal for March 24th contains the first edition of the American Medical Association Hospital Register, it will doubtless have special interest for your readers. I am sending you advance pages from that special Hospital Number for whatever comment you may wish to make.

This report is the result of the special census of hospitals taken within the past few weeks, and the statistics, therefore, are new and not obtainable elsewhere. In addition to information that is of general interest, there are a number of facts concerning the hospital situation in Georgia. For example, the Georgia section of the data on page 912 shows that there is a total of 85 general hospitals with a capacity of 4,771 beds and having on the average 2,720 patients, the percentage of occupancy being 57 as compared with 66 per cent occupancy for all the general hospitals of the United States. The nervous and mental hospitals of the state number 5, with a capacity of 5,776 beds and having 5,512 patients.

Going on through the Georgia section we find similar statistics for each of the other types of hospitals, giving a total of 110 registered hospitals with 11,699 beds and 8,940 patients, plus 398 basins or a grand total capacity of 12,097 beds for

all the hospitals in the State.

Turning a leaf, you will find on page 914 complete statistics for each of the different agencies that control hospitals within the State. Data of interest are found on pages 918 and 919, and especially on page 931 where there is a complete list of all the hospitals in Georgia that are admitted to the A. M. A. Hospital Register, giving the name and location of the hospital; the type of service rendered; the capacity; the average number of patients; whether the hospital is approved for the training of interns; for residencies in specialties, and whether approved by the American College of Surgeons. Its status regarding nurse training is also indicated. You will observe that eight hospitals in Georgia are approved for internships by the Council on Medical Education and Hospitals, and that three are approved for residencies in specialties. Five hospitals with a capacity of 30 beds were not admitted to the Register.

A list of one approved clinical laboratory in the State is printed on page 981.

N. P. COLWELL, *Secretary*,
Council on Medical Education and
Hospitals, A. M. A.

March 22, 1928.

THE BASIS OF DOCTORS' CHARGES

To the Editor:

I think that there is a growing recognition among the medical profession of the advisability of educating the public on matters pertaining to the medical profession by ethical advertising.

A year or two ago the *Saturday Evening Post* pointed out the necessity of the members of the medical profession writing popular articles for the edification of the layman, and other articles have been published on that subject, and some little advertising has been done by certain state and county societies.

There can be no question but that the attention of the public is monopolized by the intensive advertising campaigns that are carried on by all types of industry, and that more necessary and instructive pieces of information, from the medical view point, which are not brought to public notice by some form of publicity remain unheard of.

The best thing for patients is good medical attention. To render good medical service most physicians must be free from the worries and cares which come from inadequate compensation, and inadequate compensation arises most frequently from a failure of the public to sympathize with the doctor in trying to collect a reasonable fee for his service. This intimidates the physician, and often having no argument at his command he gives away to the opinion of the patient, when if he were better informed as to his rights he would stand firm in his demands.

Dr. M. J. Breuer of Lincoln, Nebraska, published in the Bulletin of the American Medical Association the enclosed "Basis of Doctors' Charges." I believe that this information should be presented to the public in some courteous fashion, and I have Dr. Breuer's permission to employ it in the manner I suggest below. I am writing this letter to you to ask if you think that it is advisable to publish this in the Journal of the State Association with the idea of bringing it to the attention of the members, and then presenting it at the coming meeting with the request that during the ensuing year a copy of "Basis of Doctors' Charges" be sent out by each member of the State Medical Association in the envelope in which he sends his monthly bills. In such a way the public of Georgia would soon be educated to the different attitude toward the charges which a physician is making for his service.

It is not unlikely that I am over-enthusiastic about something which is of no real value, but I feel strongly about the matter, and I think that many of the younger men, and those who are to later join our ranks, will be very materially benefited by such a procedure, if it is accepted and carried out now by the older and respected men of our profession.

MONTAGUE L. BOYD.

Atlanta, March 29, 1928.

THE BASIS OF DOCTORS CHARGES

Published in The American Medical Association Bulletin, October, 1926.

1. A physician works on a margin of profit quite as directly as a merchant. If an automobile salesman sells you a car, you do not accuse him of having made \$1,500 by a half hour's sales talk. The greater part of the \$1,500 he must pass on to the original producers of the car. His fee is, likewise, not all for himself; he must pass a considerable part of it on to the original producers of the service he conveys to the patient. Too often, in a particular case, he loses sight of the fact that his knowledge and material for that case have cost money. In a modern, well-equipped, properly manned office, the overhead expense may be more than 50 per cent of the gross receipts. The fee that is charged must, therefore, include the portion that pays for automobile, rent, medical journals, stenographer and post-graduate courses, as well as apparently paying for the time spent in serving the patient. The "overhead" must be considered in fixing fees.

2. People are apt to complain because charges for medical services are higher than they used to be. They do not always stop to think how much more they receive for what they have to pay. Our grandfathers paid the doctor a dollar or two to see a case of diphtheria, and the patient usually died. Today it may cost \$25, and the patient usually gets well; but it costs that much to get him

well. Patients used to come in for an examination and pay \$1 for the tongue, temperature and pulse observation. Now we spend hours in going over them carefully, and expend laboratory and roentgen-ray materials. We save lives and limbs, but it requires time, skill, instruments and materials; and the patient, who gets the benefit, must pay the bill. Very often the physician, a poor business manager, pays it himself. Remember then that when the physicians' work is well done the patient's fee represents value received.

3. The physician's work is a sort of salvage job. He saves what he can of the sick man's life, limb, time and comfort. Every other salvage job is paid for on the basis of the value of the thing salvaged; that seems to be accepted as a fair code in all lines save in the practice of medicine. The most closely related example is that of the lawyer. If a lawyer wins a \$10,000 lawsuit, even though it requires less time and effort on his part, he gets more for it than for winning a \$100 one. If the physician is able to save the life and time of a man who draws \$10,000 a year, he is on the same basis entitled to a greater return than for the same services to a man who earns \$5 a day. Therefore, in one of its aspects, a physician's fee should be a percentage of a salvage value.

4. There are some intangible factors entering the amount of a fee, such as skill and responsibility. One man will earn more by a five minute operation than by a week's hard work; and his skill may be quite a natural gift that cost him more effort to learn than any one else usually expends. There are some social students who would deny his right to receive more reward for his work than any one else does; but at least, under the present organization, such people as a class command a higher reward, and no individual can reform the situation by failing to take his own advantage of it. Then, there are cases in which the physician assumes considerable responsibility; the risk of life and welfare is on his shoulders and the worry on his mind, even though he does not spend a great deal of time and work on the case. To a patient, it may seem that a high fee is easy money in such a case, if he does not understand the situation properly.

5. The competent physician surely renders as valuable a service to the community as the banker or the merchant. Most of us feel that his services are even more valuable and fundamental, but for the sake of this argument it will suffice to consider them of equal value and importance. Therefore, the doctor deserves at the hands of the community at least equal reward with that of its other useful citizens; he is entitled to live well; to have a good house; to dress up his wife, educate his children, provide for his old age, and be freed as far as possible from the anxiety and uncertainty of existence. This the community owes him as its duty to him. As its duty to itself, the community should keep the qualified physician in a condition

to be of maximum service, healthy, satisfied, with sufficient leisure to think, study, and progress, and with sufficient means to keep up with the advancement of knowledge and training. The patient's fee, then, is a contribution on the part of the community, toward keeping the right kind of a man at its disposal for the time of need, and toward keeping this man in the right condition to render most efficient service whenever it may become necessary.

FREE CLINICS IN GEORGIA

I have just read in the March issue of the bulletin of the American Medical Association your discussion of the free clinics in their relation to Georgia.

I want to thank you most sincerely for the spirit in which this was presented. Coming from you as representing the medical profession, it makes me feel very grateful.

I have always felt that the physician should play a larger part in preventive medicine, and if my plans for the next year or two could be carried out, it would still materially strengthen the relation you mention in this article.

If our diagnosis campaign can be staged through the medical societies as I have planned, the majority of cases of tuberculosis should be left in the hands of the private physician; not only tuberculosis, but many other problems of a public health nature, should be handled through the family physician.

T. F. ABERCROMBIE, M.D.,
Commissioner of Health.

March 29, 1928.

ABSTRACTS FROM REQUIREMENTS FOR THE LISTS OF APPROVED HOSPITALS

Prepared by the Council on Medical Education and Hospitals of the American Medical Association.

ESSENTIALS IN A HOSPITAL APPROVED FOR INTERNS GENERAL STATEMENTS

Welfare of the Patients—Only hospitals in which the entire plant and personnel constantly function primarily in the interest of the patient are acceptable for accrediting as institutions for the training of interns, however abundant the equipment of the hospital may be.

Interns' Living Quarters—The hospital shall provide reasonably comfortable living quarters for the interns with opportunities for recreation, both indoor and outdoor, appropriate to the locality and environment of the hospital.

THE STAFF OF THE HOSPITAL

Character of Staff—There must be an organized staff of ethical physicians who hold the degree of doctor of medicine from acceptable medical schools, who are of unquestioned professional and moral integrity; who are proficient in general

practice or in the special fields to which they devote themselves; who give personal attention to the patients under their charge, and who will provide adequate facilities, instruction and that sympathetic co-operation without which interns and graduate students cannot obtain the practical training for which they are serving the hospital.

THE EQUIPMENT OF THE HOSPITAL

Laboratory—There must be a clinical laboratory in charge of a pathologist of attainments and standing at least equal to those of other staff members, who shall be in charge of the laboratory, supervise the work of, and give instruction to the interns.

Necropsies—The percentage of necropsies in a hospital has come to be recognized as an index of its genuine educational activities. After January 1, 1928, no hospital will be approved for the training of interns which does not have a record of necropsies on at least 10 per cent of all deaths in the hospital and after January 1, 1929, the minimum required will be 15 per cent.

Roentgen-Ray—The roentgen-ray department shall be in charge of a roentgenologist whose attainments are at least equal to those of other staff members and who shall supervise and instruct the interns in all essential phases of roentgenology. The department must be equipped to do roentgenographic, fluoroscopic, and therapeutic work.

Anesthesia—The hospital is expected to provide equipment and facilities for, and expert supervision, preferably by a staff member, over the administering of the usual kinds of local and general anesthetics and the instruction of interns in anesthesiology.

Medical Library—There shall be a working medical library, in charge of a librarian, which should contain a useful selection of late editions of standard text and reference books and current files of not less than ten of the better medical journals.

HISTORIES AND RECORDS

Complete Histories—There must be complete histories, giving the patient's complaint, physical examination at time of admission to hospital, preliminary diagnosis, laboratory findings, description of operation, if any, daily record of case, final diagnosis, condition and date when discharged from hospital, end-results, and in case of death, necropsy findings, if necropsy is performed.

ADMISSION TO THE APPROVED LIST

1. *Application for Approval*—Hospitals that want to be accredited for intern training, either as general or as special hospitals, should apply to the Council on Medical Education and Hospitals of the American Medical Association, 535 North Dearborn Street, Chicago.

2. *Survey Report*—A hospital Survey Report Blank in duplicate will be supplied on application. This should be filled out carefully by the superintendent or by some staff member who is acquainted with the intern service in the hospital. In addition, the Council desires also: (a) a list of all physicians

who practice in the hospital; (b) an outline of the course, or order, in which the intern progresses through the different departments, and (c) the name of responsible instructor, length of time and amount of work required of the intern in each department.

REGISTERED HOSPITALS IN GEORGIA

Jour. A. M. A., March 24, 1928

| City, Pop.—County | Type of Service | Beds | Aver. Pts. | Con- | No. Tr Sch. | Supt. M.D. R.N. Lay | Year Est. |
|---|-----------------|------|------------|--------|------------------|---------------------|-----------|
| Adel, 1,720—Cook | | | | | | | |
| Adel Hospital | Gen | 10 | 4 | Part | No | M.D. | 1916 |
| Albany, 13,800—Dougherty | | | | | | | |
| Phoebe Putney Mem. Hosp.†..... | Gen | 40 | 20 | Indep | Yes ¹ | R.N. | 1911 |
| Alto, 168—Habersham | | | | | | | |
| State Tuberculosis Sanatorium..... | TB | 240 | 101 | State | No | M.D. | 1910 |
| Americus, 9,010—Sumter | | | | | | | |
| Americus and Sumter County Hospital..... | Gen | 30 | 18 | Cy&Co | Yes ¹ | R.N. | 1911 |
| Americus Colored Hospital..... | Gen | 25 | 10 | Indiv | No | Lay | 1923 |
| Athens, 16,400—Clarke | | | | | | | |
| Athens General Hospital†..... | Gen | 72 | 28 | County | Yes ¹ | R.N. | 1921 |
| Fairhaven Tuberculosis Sanitarium..... | TB | 26 | 12 | County | No | R.N. | 1926 |
| St. Mary's Hospital..... | Gen | 35 | 29 | Indep | Yes ¹ | R.N. | 1906 |
| Atlanta, 200,616—Fulton | | | | | | | |
| Atlanta Hospital | Gen | 30 | 25 | Indiv | Yes ¹ | R.N. | 1907 |
| Battle Hill Sanatorium..... | TB | 240 | 170 | Cy&Co | Yes ¹ | M.D. | 1910 |
| Blackman Health Resort..... | Gen | 70 | 45 | Indep | No | M.D. | 1879 |
| Dr. Brawner's Sanitarium..... | N&M | 42 | 35 | Indiv | Yes | M.D. | 1910 |
| Confederate Sold. Home ^{2 3} | Gen | 34 | 13 | State | No | Lay | 1901 |
| Contagious Disease Hospital..... | Iso | 30 | 10 | City | No | M.D. | 1904 |
| Davis-Fischer Sanatorium*†..... | Gen | 150 | 80 | Indep | Yes ¹ | R.N. | 1908 |
| Florence Crittenton Home..... | Mater | 10 | 4 | Indep | No | Lay | 1887 |
| Georgia Baptist Hospital*†..... | Gen | 130 | 100 | Church | Yes ¹ | Lay | 1903 |
| Grady Memorial Hospital*†..... | Gen | 500 | 350 | City | Yes ¹ | Lay | 1891 |
| Home for Incurables..... | Incur | 45 | 42 | Indep | No | Lay | 1901 |
| MaeVicar Hospital of Spelman College ³ | Gen | 45 | 22 | Indep | Yes ¹ | R.N. | 1886 |
| Mercy Hospital ³ | Gen | 30 | 20 | Indiv | No | M.D. | |
| Dr. Noble's Private Infirmary..... | Gen | 25 | 15 | Indiv | Yes | R.N. | 1896 |
| Piedmont Hospital*†..... | Gen | 115 | 80 | Indep | Yes | Lay | 1905 |
| St. Joseph Infirmary*†..... | Gen | 125 | 80 | Church | Yes ¹ | Lay | 1881 |
| St. Mary's Hospital..... | Mater | 20 | 12 | Indiv | No | Lay | 1905 |
| Southeastern Sanatorium ³ | Conv | 40 | 25 | Part | No | M.D. | 1926 |
| Station Hospital | Gen | 100 | 40 | Army | No | M.D. | 1883 |
| United States Penitentiary Hospital ² | Gen | 90 | 55 | Fed | No | M.D. | 1900 |
| United States Veterans' Hospital No. 48†..... | Gen | 85 | 80 | VetBur | No | M.D. | 1920 |
| Augusta, 55,700—Richmond | | | | | | | |
| Bruce Hospital | Gen | 25 | 2 | Indiv | Yes | M.D. | 1926 |
| Dr. Burdshaw's Eye, Ear, Nose and Throat | | | | | | | |
| Private Hospital | EENT | 10 | New | Indiv | No | M.D. | 1927 |
| Margaret Wright Hospital..... | Gen | 20 | 14 | Part | Yes ¹ | M.D. | 1908 |
| United States Veterans' Hospital No. 62†..... | N&M | 574 | 570 | VetBur | No | M.D. | 1920 |
| University Hospital*†..... | Gen | 246 | 182 | City | Yes ¹ | M.D. | 1914 |
| Willenford Hospital for Women and Children†..... | Gen | 50 | 22 | Indep | Yes ¹ | R.N. | 1910 |
| Bainbridge, 4,792—Decatur | | | | | | | |
| Bainbridge Hospital | Gen | 32 | 22 | Indiv | No | M.D. | 1915 |
| Riverside Hospital | Gen | 25 | 18 | Indep | Yes | R.N. | 1917 |
| Barwick, 381—Brooks | | | | | | | |
| Sanchez Private Sanitarium..... | Gen | 12 | 3 | Indiv | No | Lay | 1920 |
| Brookhaven—DeKalb | | | | | | | |
| Brookhaven Manor | Conv | 11 | 6 | Indiv | No | Lay | 1925 |
| Brunswick, 17,200—Glynn | | | | | | | |
| Brunswick City Hospital..... | Gen | 35 | 10 | City | Yes ¹ | M.D. | 1904 |
| Cairo, 1,908—Grady | | | | | | | |
| Walker Hospital | Gen | 20 | 12 | Indep | Yes | M.D. | 1914 |

| | | | | | | |
|--|-------|-----|-----|--------|------------------|-----------|
| Canton, 2,679—Cherokee | | | | | | |
| Coker's Hospital | Gen | 23 | 9 | Part | Yes ¹ | M.D. 1923 |
| Cartersville, 4,350—Bartow | | | | | | |
| Dr. Lowry's Emergency Hospital..... | Gen | 8 | 2 | Indiv | No | M.D. 1926 |
| Cave Spring, 738—Floyd | | | | | | |
| Georgia School for Deaf ² | Gen | 20 | 4 | State | No | Lay 1846 |
| Cedartown, 4,053—Polk | | | | | | |
| Cedartown Hospital | Gen | 8 | 3 | Indiv | No | M.D. 1926 |
| Hall-Chaudron Hospital | Gen | 8 | 4 | Part | Yes ¹ | R.N. 1924 |
| Columbus, 45,000—Muscogee | | | | | | |
| Columbus City Hospital†..... | Gen | 125 | 64 | Cy&Co | Yes ¹ | Lay 1915 |
| Cordele, 6,538—Crisp | | | | | | |
| Cordele Sanatorium | Gen | 15 | 5 | Indep | Yes | Lay 1905 |
| Cuthbert, 3,022—Randolph | | | | | | |
| Patterson Hospital | Gen | 22 | 14 | Part | Yes ¹ | M.D. 1920 |
| Dalton, 5,222—Whitfield | | | | | | |
| Hamilton Memorial Hospital..... | Gen | 36 | 9 | Indep | Yes ¹ | R.N. 1920 |
| Decatur, 6,150—DeKalb | | | | | | |
| Georgia Sanitarium | Gen | 12 | 5 | Indiv | No | M.D. 1923 |
| Scottish Rite Hospital for Crippled Children†.. | Ortho | 64 | 60 | Frat | No | R.N. 1915 |
| Donalsonville, 747—Seminole | | | | | | |
| Chason's Hospital | Gen | 40 | 8 | Indep | Yes | M.D. 1919 |
| Douglas, 3,401—Coffee | | | | | | |
| Clark and Smith Sanitarium..... | Gen | 14 | 8 | Part | Yes ¹ | Lay 1922 |
| Dublin, 7,707—Laurens | | | | | | |
| Claxton-Montford Hospital | Gen | 25 | New | Part | Yes | R.N. 1927 |
| Dublin Clinic | Gen | 40 | 18 | Indep | Yes ¹ | M.D. 1924 |
| Eastman, 2,707—Dodge | | | | | | |
| Murrell Hospital | Gen | 12 | 4 | Indiv | No | Lay 1926 |
| Emory University—DeKalb | | | | | | |
| Wesley Memorial Hospital* † †..... | Gen | 300 | 127 | Church | Yes ¹ | M.D. 1905 |
| Fitzgerald, 6,870—Ben Hill | | | | | | |
| Fitzgerald Hospital | Gen | 35 | 15 | Indep | Yes ¹ | M.D. 1920 |
| Ft. Benning—Chattahoochee | | | | | | |
| Station Hospital | Gen | 193 | 125 | Army | No | M.D. 1918 |
| Ft. Oglethorpe, 740—Catoosa | | | | | | |
| Station Hospital | Gen | 78 | 25 | Army | No | M.D. 1864 |
| Ft. Screven, 17—Chatham | | | | | | |
| Station Hospital | Gen | 30 | 13 | Army | No | M.D. 1899 |
| Gainesville, 6,272—Hall | | | | | | |
| Downey Hospital† | Gen | 46 | 20 | Indep | Yes ¹ | R.N. 1909 |
| Griffin, 8,240—Spalding | | | | | | |
| Griffin Hospital | Gen | 40 | 30 | Cy&Co | Yes ¹ | R.N. 1903 |
| Hazlehurst, 1,383—Jeff Davis | | | | | | |
| Dr. John M. Hall's Sanitarium ³ | Mater | 18 | 10 | Indiv | No | M.D. 1909 |
| Jesup, 1,415—Wayne | | | | | | |
| Drs. Colvin and Ritch Sanitarium..... | Gen | 21 | 12 | Part | Yes ¹ | Lay 1924 |
| LaFayette, 2,104—Walker | | | | | | |
| LaFayette Sanitarium | Gen | 12 | New | Part | No | M.D. 1927 |
| LaGrange, 24,700—Troup | | | | | | |
| Dunson Hospital | Gen | 50 | 25 | City | Yes ¹ | Lay 1910 |
| Macon, 59,200—Bibb | | | | | | |
| Hopewell Sanatorium | TB | 30 | 22 | County | No | Lay 1926 |
| Lundy Hospital | Gen | 30 | 25 | Indiv | No | M.D. 1920 |
| Macon Hospital * †..... | Gen | 145 | 97 | City | Yes ¹ | M.D. 1896 |
| Middle Georgia Santorium..... | Gen | 50 | 21 | Indep | Yes ¹ | R.N. 1911 |
| Oglethorpe Private Infirmary..... | Gen | 38 | 14 | Indep | Yes ¹ | R.N. 1920 |
| Pumpelly-Massenburg Sanatorium | Gen | 26 | 18 | Indep | No | Lay 1921 |
| Marietta, 6,190—Cobb | | | | | | |
| Nolan Sanitarium | Gen | 15 | 3 | Indiv | No | G.N. 1909 |
| Milledgeville, 4,619—Baldwin | | | | | | |
| Allen's Invalid Home..... | N&M | 120 | 100 | Indiv | No | M.D. 1890 |
| City Hospital | Gen | 16 | 6 | Indep | No | R.N. 1919 |

| | | | | | | |
|--|-------|-------|--------|------------------|------|------|
| Georgia State Penitentiary General Hospital ² ..Gen | 60 | 40 | State | No | Lay | 1898 |
| Georgia State Penitentiary Tubercular Hosp. ² ..TB | 60 | 60 | State | No | M.D. | 1910 |
| Georgia State Sanitarium.....N&M | 5,000 | 4,782 | State | Yes ¹ | M.D. | 1842 |
| Millen, 2,030—Jenkins | | | | | | |
| Millen HospitalGen | 20 | 7 | Indiv | No | M.D. | 1918 |
| Mulkey HospitalGen | 10 | 7 | Indiv | No | M.D. | 1923 |
| Moultrie, 6,739—Colquitt | | | | | | |
| Daniel Private Sanitarium.....Gen | 9 | 4 | Indiv | No | M.D. | 1916 |
| Edmonson-Brannen HospitalGen | 12 | 4 | Part | No | M.D. | 1921 |
| Newnan, 7,037—Coweta | | | | | | |
| N. Curtis King Hospital.....Gen | 15 | 2 | Indiv | No | R.N. | 1925 |
| Newnan HospitalGen | 25 | 6 | Indep | No | Lay | 1925 |
| Plains, 611—Sumter | | | | | | |
| Wise Sanitarium [†]Gen | 60 | 32 | Indep | Yes ¹ | M.D. | 1920 |
| Rome, 14,000—Floyd | | | | | | |
| Harbin Hospital [†]Gen | 75 | 19 | Indiv | Yes ¹ | Lay | 1908 |
| McCall HospitalGen | 40 | 15 | Indep | Yes ¹ | Lay | 1916 |
| Sandersville, 2,641—Washington | | | | | | |
| Rawling's SanitariumGen | 75 | 35 | Indiv | Yes ¹ | Lay | 1893 |
| Savannah, 96,400—Chatham | | | | | | |
| Central of Georgia Railway Hospital.....Indus | 62 | 40 | Indus | No | R.N. | 1927 |
| Charity HospitalGen | 42 | 18 | Indep | Yes ¹ | M.D. | 1893 |
| Georgia InfirmaryGen | 80 | 70 | Indep | Yes ¹ | M.D. | 1858 |
| Kiwanis Sun Shine Unit of Chatham | | | | | | |
| Savannah Tuberculosis Association.....TB | 7 | 6 | Indep | No | M.D. | 1926 |
| Oglethorpe SanatoriumGen | 50 | 25 | Indiv | Yes ¹ | R.N. | 1908 |
| St. Joseph's Hospital.....Gen | 75 | 55 | Church | Yes ¹ | Lay | 1875 |
| Savannah HospitalGen | 70 | 50 | Indep | Yes ¹ | R.N. | 1836 |
| Telfair HospitalGen | 60 | 35 | Indep | Yes ¹ | R.N. | 1884 |
| United States Marine Hospital, No. 20 [†]Gen | 146 | 130 | USPHS | No | M.D. | 1873 |
| Statesboro, 3,807—Bulloch | | | | | | |
| Van Buren's Sanitarium.....Gen | 12 | 3 | Indiv | Yes | M.D. | 1918 |
| Summerville, 1,003—Chattooga | | | | | | |
| Summerville-Trion HospitalGen | 25 | New | Part | No | M.D. | 1927 |
| Swainsboro, 1,578—Emanuel | | | | | | |
| Franklin-Coleman HospitalGen | 15 | 8 | Indiv | No | M.D. | 1916 |
| Thomasville, 10,301—Thomas | | | | | | |
| John D. Archbold Memorial Hospital [†]Gen | 100 | 53 | Indep | Yes ¹ | M.D. | 1925 |
| Tifton, 3,005—Tift | | | | | | |
| Coastal Plain Hospital ³Gen | 10 | 7 | Part | No | Lay | 1920 |
| Valdosta, 12,900—Lowndes | | | | | | |
| Little-Griffin Private Hospital.....Gen | 50 | 18 | Part | Yes ¹ | M.D. | 1915 |
| Vidalia, 2,800—Tombs | | | | | | |
| New Vidalia Hospital.....Gen | 50 | 18 | Indep | Yes ¹ | M.D. | 1920 |
| Washington, 4,208—Wilkes | | | | | | |
| Washington General Hospital.....Gen | 20 | 5 | Indep | No | M.D. | 1924 |
| Waycross, 20,500—Ware | | | | | | |
| Atlantic Coast Lines Hospital [†]Indus | 75 | 41 | Indus | No | Lay | 1899 |
| King's Daughters' Hospital.....Gen | 30 | 20 | Church | Yes ¹ | R.N. | 1907 |
| Winder, 3,335—Barrow | | | | | | |
| Mathews' HospitalGen | 10 | 2 | Indiv | No | R.N. | 1925 |

Total registered hospitals in Georgia, 110; capacity, 11,699; average census, 8,940. Hospitals not admitted to the register, 5; capacity, 30.

△=Hospitals approved by American College of Surgeons 1=Nurse training school approved by state board of nurse examiners

*=Hospitals approved for intern training

2=Hospital department of an institution

†=Hospitals approved for training in specialties

3=No report for 1927. Latest previous report used

APPROVED CLINICAL LABORATORIES

All the laboratories on the approved list are supervised by persons having the M.D. degree, and conform to the other requirements of the Council on Medical Education and Hospitals. The "Essentials of an Approved Clinical Laboratory" precedes this list. —J. A. M. A., March 24, 1928.

ATLANTA, GEORGIA

Laboratories of Drs. Bunce, Landham and Klugh, 139 Forrest Ave., Geo. F. Klugh, Director.

NEWS ITEMS

The United States Civil Service Commission, Washington, D. C., announces that applications will be received until June 30, 1928, for open competitive examinations to fill vacancies in the service as follows: Assistant Medical Officer, Associate Medical Officer, Medical Officer, and Senior Medical Officer. There is especial need for medical officers qualified in tuberculosis or neuropsychiatry.

The United States Civil Service Commission, Washington, D. C., announces that applications will be received until June 23, 1928, for open competitive examinations to fill vacancies for Physiotherapy Aide and Physiotherapy Pupil Aide.

Dr. Wm. W. Anderson announces the removal of his office to suite 33 Doctors Building, 478 Peachtree St., N.E., Atlanta.

Dr. G. G. Lunsford, formerly of Weston, has been elected health officer for Crisp County.

Dr. Joe P. Bowdoin, Director of County Health Work, announces the fifth annual tour of the "Healthmobile" operated by the state board of health. When this year's tour has been completed, all of Georgia's one hundred and sixty-one counties will have been visited. This year's schedule includes the following counties on dates mentioned: Johnson County, April 9; Emanuel, April 19; Effingham, May 10; Screven, May 19; Jenkins, June 6; Bulloch, June 18; Candler, July 7; Wheeler, July 23; Montgomery, August 1; Toombs, August 9; Tattnall, August 21; Long, September 10; Liberty, September 18; Monroe, October 13; Rockdale, October 30, and DeKalb, November 7.

The Clarke County Medical Society sponsored a Medical Institute which was held at Athens on March 7 and 8. The following are titles of papers read: Prenatal Care by Dr. James R. McCord, Atlanta; The After Care of Medical and Surgical Cases by Dr. Joseph C. Bloodgood, Johns Hopkins Hospital, Baltimore; Infant Feeding by Dr. Wm. A. Mulherin, Augusta, President of the Association; Upper Respiratory Infection in Childhood by Dr. D. Lesesne Smith, President, South Carolina Medical Association; New Methods for Old Diseases by Dr. O. C. Wengoh, Hot Springs, Arkansas; Diagnostic Methods in Tuberculosis by Dr. E. W. Glidden, Alto. On March 7 a clinic was conducted at the Athens General Hospital from 9:30 A.M. to 1 P.M.

Dr. Thos. C. Clodfelter, formerly of Tignall, has removed to Forsyth and will continue the practice of medicine at the latter address.

Dr. and Mrs. J. H. McClure, Cornelia, entertained the members of the Habersham County Medical Society and their wives on March 1.

The Georgia Association of Health Officers met at Brunswick, March 5. Dr. T. F. Abererombie, Atlanta, Commissioner of Health, and Dr. M. E. Winchester, Director of County Health Work, attended the meeting.

The Ocmulgee Medical Society held its annual meeting at Cochran on February 9.

Dr. J. W. Palmer, Ailey, has been appointed assistant chief surgeon of the Seaboard Air Line Railway.

Dr. R. C. Goolsby, Forsyth, has just completed a post-graduate course in pediatrics at Tulane University.

The Management of the Scottish Rite Hospital, Decatur, operated by the Scottish Rite Masons of Georgia, announces that there were 8,083 children treated at the institution in 1927.

The Tenth District Medical Society met at Louisville, March 22.

Dr. Walter A. Norton, Savannah, read a paper on the Surgical Treatment of Gall-Bladder Diseases before the meeting of the Georgia Medical Society on March 13.

Dr. J. M. Montfort announces the removal of his office to 407 Medical Arts Building, Atlanta. Practice limited to internal medicine.

Dr. and Mrs. R. C. Montgomery, Butler, entertained the members of Taylor County Medical Society on February 15.

The Davis-Fischer Sanatorium, Atlanta, announces that Dr. W. M. Dunn, president of the staff, has offered a reward of \$50.00 for meritorious work done by any member of the staff this year.

Dr. L. C. Fischer of the Davis-Fischer Sanatorium, Atlanta, has offered a prize of \$100.00 as an award for work done by members of the staff this year.

Dr. W. C. Humphries, Griffin, commissioner of health for Spalding County sponsored a tuberculosis clinic on March 16 at Griffin; conducted by Dr. E. W. Glidden, Alto.

The American Medical Editors' Association announces that committees have been formed to

study ways and means of standardizing medical education and medical license examinations. Other committees have been formed to study workman's compensation, pay clinics, commercial laboratories, open hospitals, drug store prescribing, pharmacy and therapeutic products and prohibition.

The Georgia Medical Society, Savannah, has completed arrangements to entertain the members of the Medical Association of Georgia at the General Oglethorpe Hotel on Thursday evening, May 10. The hotel has its own golf course, tennis court and some of the finest fishing on the Atlantic Coast is enjoyed just off the hotel grounds. The General Oglethorpe is located on Wilmington Island eight miles from Savannah, and isolated by a wonderful web of tidal waterways. Opportunities for recreation may be gratified within a short radius surrounding the hotel.

Dr. Milton W. Williamson announces the removal of his office to 202 Medical Arts Building, Atlanta.

Dr. F. C. Mims announces the removal of his office from the American Savings Bank Building to 417 Wynne-Claughton Building, Atlanta.

Dr. Wm. R. Dancy, Savannah, Chairman of the Committee on Awards for the Crawford W. Long Prize, announces that Dr. M. Hines Roberts, Atlanta, won the prize for 1927 by writing the best paper on original research work. Title of the paper was "Pigments in New-Born Infants" and read before the annual meeting of the Association, held at Athens, May 11, 12, 13, 1927.

Interstate Post Graduate Medical Association of North America will meet in Atlanta, October 15, 16, 17, 18, 19, 1928.

The American Association for the Study of Goiter, consisting of Internists, Pathologists, Radiologists, etc., as well as Surgeons, will hold their 5th annual Conference on Goiter in Denver, Colorado, June 18, 19 and 20. Several men from foreign countries have signified their intention of attending. Professor Breitner of the Von Eiselberg Clinic, Vienna, and Professor Albert Kocher of Berne, Switzerland, have accepted places on the program. Addresses and discussions on Prophylaxis, Medical Treatment, Endemic Goiter and Cretinism from the Public Health Standpoint, are on the program for the first afternoon. Pathology, various phases of Surgical Treatment, etc., will be considered the last two afternoons. All Members of State Medical Societies are invited to attend. Dr. Gordon S. Fahrni of Winnipeg, Canada, is the President, and Dr. Kerwin Kinard of Kansas City is Vice-President.

OBITUARY

Dr. Thomas C. Thompson, Vidalia, died at the Vidalia Hospital on July 25, 1927. He was born in 1885 and graduated from the University of Georgia Medical Department in 1908. Dr. Thompson took a post-graduate course at the New York Polyclinic Medical School and Hospital, New York, and for three years was a member of the staff of the Mayo Clinic, Rochester, Minnesota. He was a member of the Toombs County Medical Society, the Medical Association of Georgia, and the American Medical Association. Surviving him are his widow, Sadie Young Thompson; one daughter, Mary Ethel, Vidalia; two sisters, Mrs. H. V. Thompson, Ailey, and Mrs. W. B. Green, Vidalia; one brother, Dr. Cleveland Thompson, Millen. Funeral services were conducted from the Vidalia Baptist church.

The following resolution was adopted by the Council of the Medical Association of Georgia:

Resolved: That, in the death of Dr. T. C. Thompson, our beloved Chairman, the Medical Association of Georgia and the Council of the Association have sustained a loss that has saddened the hearts of us all.

That, we can think of this tragedy only tearfully and sorrowfully, and our minds are too much benumbed to express our feelings. We can only weep with the family and grieve for our Association and our State's great loss.

We tender to his beloved family our sincere condolence and pray to God to comfort them in their irreparable loss and profound grief.

Respectfully submitted,

E. C. THRASH, M.D., *Chairman*,
WM. H. MYERS, M.D.,
M. M. HEAD, M.D.

Committee.

Dr. Stephen H. Hankinson, Augusta, died at his home on February 11, 1928. He was born in 1877 and graduated from the University of Georgia Medical Department, Augusta, in 1900. Dr. Hankinson had practiced medicine in the western portion of the city for more than twenty-seven years and had built up a large practice. He was a member of the Masonic lodge, Richmond County Medical Society and the Medical Association of Georgia. Funeral services were conducted from the St. John's Methodist church by Rev. G. M. Eakes. Interment was in Westover cemetery.

Dr. James T. A. Gaines, Dewyrose, died at his home on February 28, 1928. He was born in 1869 and graduated from the Southern Medical College, Atlanta, in 1890. Dr. Gaines was a successful practicing physician and one of the best citizens of his community. Surviving him are his widow, four daughters: Misses Mattie Elizabeth

and Katherine Gaines of Dewyrose; Mrs. Horace Hairston, Akron, Ohio; Mrs. Chas. Allen of North Carolina; two sons, Tinsley and John Gaines of Dewyrose. Interment was in Bowman cemetery.

Dr. Henry Halsey Battey, Rome, died suddenly at his home on March 11, 1928. He was born April 17, 1857, and graduated from Harvard University Medical School, Boston, in 1879. Dr. Battey studied in the clinics of Vienna, Paris and Rome and began practice at the General Hospital at Boston, Massachusetts. He gained great fame as a physician and was constantly in demand by physicians for consultation. He was a member of the Floyd County Medical Society, Medical Association of Georgia and the American Medical Association. Funeral services were conducted from the home of his daughter, Mrs. Mather Daniel on River Avenue. Interment was in Myrtle Hill cemetery.

Dr. William Jacob Little, Macon, died at a local hospital on February 27, 1928. He was born in 1871 and graduated from the Southern Medical College, Atlanta, in 1894. Dr. Little had a wide circle of friends and for many years was on the staff of several hospitals of Macon. He was a member of the Vineville Methodist church. Funeral services were conducted by the pastor, Rev. E. F. Cook. Interment was in Rose Hill cemetery.

Dr. James Dean De Lamar, Columbus, died at his home on February 23, 1928. He was born in Harris County, January 3, 1881, and graduated from the University of Georgia Medical Department, Augusta, in 1906. Dr. DeLamar served as lieutenant in the world war. He was a member of the masonic fraternity, Muscogee County Medical Society, Medical Association of Georgia, American Medical Association, and the Rose Hill Methodist church. Dr. DeLamar is survived by his widow, four daughters, Misses Edna, Martha, Ledra and Helen DeLamar; two brothers, W. A. DeLamar, Atlanta; W. F. DeLamar, Macon; one sister, Mrs. Ben Poer, Arlington. Funeral services were conducted by Rev. M. M. Marshall from the Rose Hill Methodist church and interment in Riverdale cemetery.

QUARTZ LIGHT MANUFACTURER OPENS SOUTHERN BRANCH

Hanovia Chemical and Manufacturing Company of Newark, New Jersey, opens attractive show rooms on first floor of Medical Arts Building, Atlanta.

This Company which is the pioneer in the manufacture of Mercury Vapor Quartz Lamps joins the large group of National manufacturers requiring a Southern Branch to handle the rapidly growing demand of the South.

Complete stocks of the Alpine Sun and Kromayer lamps are held in Atlanta. New equipment and service replacements will be delivered from the new branch which brings the many Southern users of this apparatus into much closer touch than could be effected through the main office of the Company.

Sales and Service representatives in all Southern states will be directed from Atlanta.

A special calibration and inspection department equipped with the newly perfected Gordon Ultra Violet Meter is available to all users of this equipment. By this feature any quartz burner may be submitted for inspection and calibration free of charge. Out-of-town customers should make arrangements by mail for this service.

The latest announcement of Hanovia is the Radiant Heat Equipment for the generation of true Infra Red Rays, which they claim to be the most perfect of anything in this class.

The various models of the Hanovia Line are on display and all physicians and their assistants will be cordially welcomed to inspect them.

Mr. J. K. Montgomery as Georgia Sales Representative will make his headquarters here.

Mr. Henry M. Shaw is Branch Manager and Mr. James M. Scoville, Jr., Assistant.

Shortest Route to Minneapolis to The American Medical Ass'n Convention Minneapolis June 11 to 15, 1928



ADDITIONAL sleeping cars will also be operated on the famous North Western Limited, leaving Chicago 6:30 P. M. (Cent. Time) June 9th, arriving Minneapolis 7:35 A. M., June 10th.

The Chicago & North Western Line offers a choice of very attractive routes between Chicago and St. Paul and Minneapolis: via Milwaukee or Madison and Eau Claire, or via Rochester, Minnesota, with stopover without extra charge.

Tickets from Chicago and beyond to St. Paul and Minneapolis for this occasion will also be honored in EITHER DIRECTION via Rochester with stopover without extra cost.

Very low rate Summer Tourist tickets will be available to Yellowstone Park, Glacier Park, Pacific Coast and other western points, permitting stopover at Minneapolis.

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MODERN MEDICINE*

PRESIDENTIAL ADDRESS

W. A. MULHERIN, A.M., M.D.

Augusta

The purpose of my paper is not to glorify or over value the importance of any one branch of medicine. It is rather an honest effort on my part to present to you facts as I see them existing today in the practice of that grand and glorious old profession, called Medicine.

The public is today demanding more preventive and less curative medicine. This is an indication of increasing intelligence on the part of the public in health matters. It is a forward step and should be gladly welcomed by the medical profession, for every physician realizes that the ideal, most constructive and effective medicine, is to be found in preventive measures.

Preventive medicine begins with prenatal care. Healthy and vigorous parents beget offsprings with similar constitutional characteristics. Syphilitic parents, in the vast majority of instances, visit the infection on their children. The time to treat congenital syphilis, is before the baby is born. Think of the enormous number of human lives that will be saved, the many tertiary syphilitic complications that will be avoided, the great reduction in transmission of syphilis to posterity that will be accomplished, when the medical profession, as a routine measure, will have a Wassermann test made, at an early date, on every pregnant mother. The responsibilities for the adoption of this life-saving procedure, on a wholesale scale, rests with the medical profession, but most especially with the obstetricians and with the general practitioners, who do obstetrical practice.

At birth, under judicious and well trained and well directed attention, many mothers' lives will be saved that are now lost. Avoidable eclampsia, sepsis, birth injuries, hemorrhagic diseases of the newborn will all be handled more successfully as the public continues to demand it, and the medical profession responds to the new conception of medical practice.

During infancy, birth to two years of age, there are three essential demands made on the profession by the general public. They might be called "The Trinity of Health." (1) The proper feeding of babies. (2) Plenty of sleep at regular hours. (3) Abundance of fresh air, ingestion of cod liver oil during winter months, and the giving of sun baths in the summer months.

The public is asking of the pediatricians and the general practitioners that more study and assiduous attention be given to this time of life, and rightly so. It covers that period of life when the very foundation of the health of the human race is built. The building of the human body might be likened to the erection of a beautiful and substantial home. The well informed architect specifies what is to go into the building. If the contractor complies with the specifications, the result will be the erection of a beautiful and durable home, that will withstand the storms and all adverse weather. The same applies to the human body, enough is known today about nutrition to build a strong, healthy body. If the proper foods are fed to the baby, and the proper hygienic measures applied to its mode of living, its body will be substantially built and will withstand infections and the various illnesses, very much like the substantial home is unharmed by the inclement weather.

Pre-school age, two years to six years, is another very important field in preventive medicine. Physical defects, diseased tonsils, carious teeth, malocclusion, defective vision and hearing, faulty posture, malnutrition,

*Read before the Medical Association of Georgia, Savannah, Georgia, May 10, 1928.

etc., demand special attention that should be forthcoming from the profession. This is also the age at which time vaccination against smallpox, toxin-antitoxin to prevent diphtheria, mixed typhoid vaccines to protect against typhoid and paratyphoid fevers are usually given, although it would be much better if these "protectors" were administered at an earlier date. This practice of protecting the public against smallpox, diphtheria and the typhoid group of fevers is now practiced by the profession, but not as extensively as it should be practiced. There is no excuse today for anyone having any one of these three diseases.

School age offers a very excellent opportunity to the medical profession to recheck the medical corrective work that should have been done in pre-school age, and when neglected to see that it is done, also to teach health habits in the lower grades, and hygiene, physiology and biology, in the higher ones. The amount of preventive work that might be done during the school age is hard to over estimate, and this period should be fully utilized by the medical profession, not only in preventing diseases and ill health, but also in building a stronger and healthier race.

When the members of the human race have graduated from the pediatric age, birth to fifteen years, their natural rights should entitle them to possess a healthy, vigorous constitution, that will aid them in withstanding the added responsibilities and the extra wear and tear of mind and body, that the future holds in store for them. Annual periodic health examinations should be advised and practiced, the same as dentists advise their patients to return to them for regular examinations of teeth.

From this brief review of the leading activities of preventive medicine, it appears to me that public health work, pediatrics and obstetrics are the subjects of medicine that bear most directly on preventive medicine. It is reasonable to assume that as preventive medicine is increasing in popularity, and as this popularity is founded on a rational basis, the future practice of medicine will make its greatest demands on the subjects of public health, pediatrics and obstetrics. This state-

ment is not made with any desire to belittle the importance of the other branches of medicine, for they are all important, but merely to call attention to the trend of the times along medical lines and to endeavor to present it to you.

As seventy-five per cent of all public health activities will be found within the pediatric age, permit me to repeat myself, for the purpose of stressing the importance of preventive pediatrics in the present and future practice of medicine.

(1) As before mentioned, the practice of medicine, like many other practices, is undergoing radical changes. Today, the public and medical profession alike are increasingly demanding more preventive medicine. As seventy-five per cent of all worthwhile activities of preventive medicine will be found within the pediatric zone, it naturally follows that pediatrics is a very important branch of medicine and should receive the proper consideration and study from the medical profession.

(2) One-fourth to one-fifth of the general practitioner's practice will be found within the pediatric age. General practitioners treat more babies and children than do pediatricians, because they outnumber them at least fifty to one. It might be asked if general practitioners give to pediatrics one-fourth to one-fifth of their study time. I feel reasonably certain the answer would be in the negative, yet as a matter of equity this should be done in fairness to their clientele.

(3) The highest mortality in life is to be found in infancy and early childhood. Which fact should challenge the serious consideration of the medical profession. With more study given to the subject of pediatrics by pediatricians and general practitioners and, as a result, more enlightened pediatric practice applied to the baby and child, this mortality will be decidedly reduced.

(4) The foundation of health in the human race is built during its early years. If individuals are properly cared for, they will grow to strong manhood or womanhood, and prove to be a better subject for future treatment in all other branches of medicine. Therefore, good work in preventive pediatrics ramifies into all other branches of medicine.

It has been said, and I think rightly so, that the intelligence of any community may be determined by the amount of care and attention it gives to its babies and children. I believe the same process of reasoning may be applied to medical progress. A medical association can be properly evaluated, as regards its progressiveness and up-to-date conception of the advancement of medicine, by the amount of "reasonable space" it assigns to the subject of pediatrics, on its program.

The Medical Association of Georgia is to be congratulated upon its early recognition of the importance of pediatric practice. Long before other states in America caught the correct vision of its growing importance, our Association allotted to the Georgia Pediatric Society a definite and generous space on its annual scientific programs. While the Georgia Pediatric Society was the first pediatric society organized in the South, and one of the first in America, it could not have progressed and flourished as it has done, without the sympathetic co-operation and substantial support of every member of this Association.

No discussion on the subject of Preventive Medicine would be complete, if mention was not made of that most valuable and instructive journal of the American Medical Association, called "Hygiea." Its educational value to the general public, in dispelling superstition and in correcting erroneous ideas as they relate to functional and physical diseases of the body, is difficult to compute. Likewise, the amount of genuine good this journal is accomplishing for the Medical Profession, by spreading sane ideas concerning the legitimate practice of medicine is, I believe, not fully appreciated by the members of the Medical Association of Georgia.

The Woman's Auxiliary of the Medical Association of Georgia—an association that has done so much excellent constructive work for our Association, and one that has put the feminine touch on many of our activities with resulting benefit to us, and one that has contributed so very materially to the encouragement and accomplishment of a better spirit of good fellowship and brotherly love, amongst physicians of Georgia, is sponsoring

the movement to increase the subscription to "Hygiea" throughout the state. It is another manifestation of its commendable work in our behalf. Let us show our appreciation and catch their visualization, as to the importance and value of this movement. Let us realize, as they do, that medical practice in Georgia will be decidedly advanced, when every physician in our State, not only subscribes and reads this journal, but will keep a copy of it on the table in his reception room, and also wholeheartedly endeavors to have as many of his patients, as possible, to subscribe to it.

Preventive medicine is with us today and has come to stay. Let us not deceive ourselves by taking a contrary opinion. It is the most appealing, logical and practical side of medicine. The public is demanding it with increasing insistency. Let us not only respond to the request, but let us encourage its commendable progress by fully preparing ourselves in this branches of our profession that have a direct bearing on preventive medicine; bearing in mind the fact that seventy-five per cent of all activities in preventive medicine will be found within the pediatric age. Which fact but stresses the importance of pediatrics in the present and future practice of medicine.

ENCEPHALITIS AS COMPLICATION OF MEASLES

J. H. Musser and G. H. Hauser, New Orleans (Journal A. M. A., April 21, 1928), report that during an epidemic of measles, 351 cases in all were seen by one of the authors, who was struck by the occurrence in some of the patients of various, rather irregular, neurologic symptoms. These symptoms were almost entirely observed in small children. They seemed to depend on irritation of the meninges with a concomitant increase in the intracranial pressure, or to be the result of pathologic processes in the encephalon. Eight of these cases came to autopsy. The striking feature of the condition when observed grossly was the presence of numerous discrete punctate hemorrhages throughout the brain. Microscopically, the observation peculiar to this type of encephalitis was perivascular hemorrhage about some of the small vessels of the brain. None of these cases presented any clinical or postmortem evidence of tuberculosis or of syphilis.

THE DELETERIOUS EFFECTS OF IN-DISCRIMINATE USE OF THYROID PREPARATIONS IN OBESITY*

REPORT OF A CASE

WALTER W. DANIEL, A.B., M.D.

Atlanta

The indiscriminate use of thyroid preparations in obesity has grown to such an extent that it is believed that a report of a case at this time in which its deleterious effects are so pronounced, is not inopportune. Much medical literature has been written, protesting the ill-advised use of this preparation but a careful review of the literature available, fails to reveal many authentic cases.

It seems to be the consensus of opinion among recent writers that the employment of thyroid extract in obesity therapy is suitable only in those cases where there is an endocrine dysfunction, and even then it should be used cautiously.

Osler and McRae¹ state that thyroid extract should be used only in a "systematic cure" of obesity in conjunction with diet and exercise and should not be indiscriminately ordered to fat persons. They suggest one grain, three times a day, at first gradually increasing the dose while watching for untoward effects.

Osborne² goes further and advises that in fat patients, who show no other signs of sub-thyroidism, the administration of thyroid extract may precipitate hyperthyroidism. On this account, many of the so-called obesity cures are dangerous and he suggests that the sale of thyroid extract should be subject to the same restrictions as are the narcotics.

Stevens³ says that, while thyroid extract is an active reducing agent, unfortunately it causes a loss of protein as well as of fat. It produces its best results in cases of obesity that show evidences of disturbed endocrine function, but, even then, its effects must be carefully observed.

Hinck⁴ writes of this method of the treatment of obesity as follows: "Some physicians still use the dried thyroid of the sheep. It is a frequent ingredient of quack remedies. While

admitting that this remedy may be of some value in rare cases in which there is a deficiency of the secretion of the thyroid gland. Dr. Kellogg says that even in these cases, it is likely to produce serious disturbances of the heart and various nervous disorders of a more or less serious character. In by far the great majority of cases of obesity there is no devieney of thyroid secretion and administrations of thyroid is followed within a few days by quickening of the pulse and the appearance of various and more or less serious nervous disturbances, and sooner or later, grave conditions may be developed."

William⁵ says that thyroid extract fans the metabolic flame and raises the body temperature, hence its success in cases where it does succeed in reducing obesity. But where it fails, as it very often does, the failure is due to the preventive action of other endocrines, their interference being such that, instead of reducing the obesity, the thyroid activity is confined to the heart and central nervous system, which it incites to a riot of alarming symptoms. He adds that the cardinal signs of beginning thyroid intolerance are, heart hurry, undue looseness of the bowels and nasal catarrh.

REPORT OF CASE

This is a case of a white man, 52 years old, 5 feet 11 inches tall and whose average weight has been 254 pounds.

His first visit to the office was on April 10, 1927, at which time he complained of an aching pain in his hips, the small of his back and between his shoulders. He described it as a constant "aching pain."

His history shows that he was born and reared in Canada, having come to Atlanta in 1922; his occupation was foreman in a sheet metal shop. He was married and is the father of one child. However, he stated that he never experienced any pleasure from sexual connections, having exercised this function only as a duty to his wife.

Habits: Questioned closely regarding his personal habits, he denied using, or ever having used, any form of alcohol, *drugs* or *medicines* habitually.

Operations: Tonsillectomy in 1912.

Cardio-Respiratory: No positive history except for the last two weeks. He stated that

*Department of Medicine, Emory University School of Medicine, Emory University.

he had suffered shortness of breath upon exertion during this period.

Gastro-Intestinal: Subject to constipation. His bowels move only every two or three days. He eats vegetables largely and very little meat. He has had no appetite for the last week or ten days.

Genito-Urinary: Denies venereal infections. Urine is cloudy at times and often has an ammoniacal odor.

Neuro-Muscular: Has been very restless at night for the last week or ten days; is unable to relax. He tires very easily. When he lies down the pain in his legs, back and hips increases. He has been unable to work at his shop for more than three or four hours daily for the last four days. He has lost 32 pounds during the last two months; feels nervous and apprehensive of something impending all the time.

PHYSICAL EXAMINATION

This is a well developed, muscular man, 5 feet 11 inches tall, whose present weight is 222 pounds. The abdominal wall is thick and flabby. The skin is warm and dry and has a pasty, yellowish, grey pallor. The face presents an anxious and worried expression. There is nothing about his general appearance, distribution of fat or hair to suggest any endocrine dystrophy.

Mouth and Throat: The odor of the breath is foul. The pharynx is somewhat red and injected; there is some post nasal dripping. The teeth present several cavities and the gums show moderately advanced pyorrhea. The tongue is thickly coated. The voice is husky.

Eyes: The clearness of sclera and conjunctivations present a marked contrast to the color of the skin.

Neck: There are no enlarged lymphatic glands. The thyroid gland is palpable and perhaps slightly enlarged.

Thorax: The chest is well developed. The respiratory rate is 20 per minute.

Heart: The heart is normal in size, shape and position. There is a slight roughness of first sound over the mitral area.

Vessels: There is no evidence of arteriosclerosis. The pulse is full and regular. The pulse rate 96 per minute. Temperature 100 2/5.

Blood Pressure: 138/90.

Abdomen: The abdomen is flabby and somewhat pendulous. There is considerable pad of fat over the abdomen. There is no tenderness nor are any masses felt.

Extremities: Extremities seem normal and in correct proportion to the rest of the body.

Urine Examination:

| | |
|------------------|-------------------|
| Specific Gravity | 1.026 |
| Reaction | Acid |
| Albumin | Negative |
| Sugar | Negative |
| Indican | Strongly Positive |
| Microscopic | Negative |

A basal metabolic test was suggested but refused on account of expense.

After referring this man to a roentgenologist for x-ray pictures of his teeth, he was put to bed and given calomel, grs. V, followed by sodium sulphate, in the morning. To this medication was added an alkali.

His condition remained about the same until April 12, 1927, when his lower right second molar was extracted, the apex of the tooth having been shown to be in an abscessed condition by the x-ray pictures. It was thought that the absorption of the toxin from the infected tooth was the cause of the elevated temperature, increased pulse rate and rheumatic pain.

On April 13, 1927, he felt considerably better. His pulse was 100 per minute, temperature 101 and respiratory rate 20. His voice was still husky but he had very little pain.

On April 15, 1927, he telephoned to tell me that he had returned to work and was feeling fine. He said there would be no need for me to see him further.

On April 24, 1927 (nine days later), I was called again to see this man during the night. He was extremely nervous, complained of intense pain in the hips, legs and back. His temperature was 102 2/5, pulse 100, respiration 26. Upon close questioning, I learned that three days previous he had consulted an osteopath and on this same day a chiropractor who gave his particular line of treatment and that he had called me to relieve the pain, which he thought had been produced by the chiropractor. Upon further questioning, I appeared to gain his confidence

more than at any other time, for it was during this interview that he confessed that he had been taking a weight reducing substance, recommended by a local druggist, in large doses, over a period of two months and had doubled the dose during the last month in order to reduce more rapidly.

An effort was made to determine the amount of thyroid extract taken daily by this man but the calculation was rendered difficult by reason of the fact that he could only tell me the name of the preparation and the approximate amount of money he had spent therefor. Using this method of calculation, it is believed that he was taking between five and eight grains daily during the first month and between fifteen and twenty grains daily during the second month. He was taking an American product in tablet form.

From April 24th, to May 2nd, he was kept in bed, being given sedatives and eliminants. On May 2nd, a physical examination showed that his lungs were becoming congested. He had had a severe chill during the night. There was a slight but frequent cough. The pulse rate was 120; respiration 32; temperature 100 $\frac{2}{5}$. Blood pressure was 140/80.

Blood count was—

Red Cells 4,250,000

White Cells 12,000

Differential count—

Polymorphonuclear Neutrophils 77%

Transitional Cells 2%

Large Mononuclear Lymphocytes 5%

Small Mononuclear Lymphocytes 16%

Consultation was requested and Dr. Ed. H. Greene saw him with me. Dr. Greene was of the opinion that the patient had a rapidly developing pneumonia and was in a precarious condition. He also thought that this condition might possibly have resulted from the lowered resistance, produced by the excessive use of the thyroid preparation.

The terminal pneumonia developed rapidly and on May 5th the patient died.

CONCLUSIONS

1. Thyroid extract is absolutely contra-indicated in all cases of obesity unless there is a definite indication for its use in which case it should be used cautiously and a constant watch be kept for the appearance of tachy-

cardia, dyspnea, rise in temperature or nervous manifestations or other indefinite symptoms. There may or may not be looseness of the bowels.

2. It is believed that the excessive use of thyroid preparations lowers the resistance, thereby rendering the individual susceptible to infection.

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OBSTRUCTIONS OF THE URETERS*

JOHN L. GARRARD, M. D.

Rome, Ga.

What are the conditions that will bring about an obstruction in the ureter? The most common cause is stricture, calculous, kinks, torsion, and new growths within the abdominal cavity. Also growths and foreign bodies in the bladder.

Let us devote a few moments to stricture of the ureter and some of the results. First, we have an interference with drainage from the kidney, and a damming back of the urine causing a stasis, which, in turn, is a fertile field for disease germs. As the condition progresses and pressure is increased we have pain, possibly dilatation of the kidney pelvis, which may result in a hydronephrosis, a pylo hydronephrosis and a pyle-nephritis.

POINTS OF CONFUSION

If the patient is a male and pain in the left side we naturally think of some condition of the kidney or the ureter. If on the right side he is liable to lose his appendix.

If patient is a female the same condition holds true, only she may lose a tube or an ovary.

DIAGNOSIS AND TREATMENT CAN BE MADE AT THE SAME TIME

Insert shadow catheter into ureter that is causing trouble, make ureterogram which will differentiate between stricture and calculus.

*Read before the Seventh District Medical Society at Calhoun, Ga., September 30, 1925.

Dilate ureter by catheter method or with electricity.

This procedure will also enable you to collect specimen from kidney, for examination, and to measure the capacity of the kidney pelvis.

We now pass to ureteral calculus; here is a condition that is more easily diagnosed. All of you are familiar with the symptoms of a ureteral calculus, the severe pain radiating from kidney along the course of the ureter to the bladder and external urethra and groin of the affected side with an absence of a rise in temperature an absence of increase in the pulse rate. What are we going to do with this patient? How are we to know whether he has the complete blocking of the ureter or not?

If the patient has already had a nephrectomy and we are dealing with a one kidney proposition, and at the end of twelve to twenty-four hours he does not void, and there is no urine in the bladder on catheterization, we know positively that he has a complete blocking.

Then is it not important to be on the alert for this condition in a two kidney patient? No doubt but there are patients that have lost their kidney and do not know it, the work having been assumed by the other kidney.

How are we to know when we have a complete blocking and what shall the treatment be?

A cystoscopy is the only thing that will tell you whether the kidney is functioning or not. Ordinarily we can see the urine as it flows from the ureteral orifice but not always, we must be sure. So block off good side with catheter, inject 5 c. c. indigo carmin into vein and watch for the appearance of this dye, in suspicious side, and if none shows within an hour, you may know that you have a complete blocking of the ureter or a destroyed kidney.

If you wish, you can fill the bladder with an alkaline solution and use Phthalein, which will give you a red appearance as the urine flows from the ureter.

After convincing ourselves that there is no function in that side, let us proceed with the diagnosis and treatment.

Insert an x-ray catheter, push it by stone if

you can, on 'up into the kidney, then watch for flow of urine from catheter, make ureterogram, this will show whether stone is in ureter or not, and its location as against a calcified gland or a fecolith.

If you have established a flow of urine through the catheter then withdraw catheter and let patient get well. If on the other hand, you are not able to push beyond the calculus, dilate ureter to point of blocking, and inject a sterile non-irritating oil into ureter, withdraw cystoscope, put patient to bed and watch for a rise of temperature, increased pulse rate and continuation of pain.

If patient quiets down leave him alone, if not, after the elapse of a reasonable time, cystoscope again, and if no function of diseased side, we should either cut down on ureter and remove the stone, or drain the kidney, giving the calculus a chance to pass from the ureter.

We are safe to leave a calculus alone for at least three months, if there is no complete blocking of ureter.

KINKS OF THE URETER

A kink in the ureter is the result of a hydronephrosis more often than the cause. Any condition that will shorten the distance between the bladder and kidney may of course produce the kink, such as a floating kidney. On ureteral catheterization you may meet some resistance, apyelo-ureterogram will clinch your diagnosis.

TREATMENT

Establish drainage with ureteral catheterization.

TORSION

Treatment: Same as for stricture..

NEW GROWTHS WITHIN THE ABDOMEN

New growths within the abdomen may obstruct the ureter by pressure. Here we should call in the abdominal surgeon, and the internal medicine man to help us.

NEW GROWTHS WITHIN THE BLADDER

New growths may obstruct ureteral orifice, or a large vesical stone by its pressure.

Treatment: Remove calculus and get rid of new growth if possible.

The question is sometimes raised as to the advisability of cystoscope in renal colic; you need no hesitate to do so, for your patient

may suffer for some days at least, and a ureteral dilatation will often give instant relief.

In conclusion, let me state that the general practitioner, the surgeon, and the urologist, should all work together, which will result in clearer diagnosis, and a better satisfied patient.

PREVENTION AND TREATMENT OF UNDERNOURISHMENT IN CHILDHOOD*

I. M. LUCAS, M.D.

Albany

The treatment of the undernourished in children is divided in two classes. Namely, (1) Preventive and (2) Curative.

Preventive measures against malnutrition must, to be successful, begin in the antenatal period of the child's existence; in other words prenatal care and advice for the expectant mother are of the utmost importance.

In order that an infant be born with best chance for his life struggle it is important not only should the ordinary attention be given to the urine, blood pressure, measurements, etc., of mother, but her diet gone into with special reference to vitamins and essential food substances.

McCollum has shown that the pregnant mother has very little capacity for manufacturing vitamins and that her off-spring will not receive a sufficient amount of these essential substances unless her diet contains them in sufficient abundance for both herself and her child. This applies to the period of gestation and lactation.

The common every day diet of the average household is only too often a deficient one, consisting of devitaminized cereals and rooty vegetables and fleshy meats and broths made therefrom. Such a diet is not proper for a pregnant or nursing mother, as it is low in all of the essential food substances and is liable to react unfavorably on the child. Insistence should be made upon mother to drink a generous amount of milk and eat cereals made from the whole grain. Whole wheat bread, eggs, if they agree with the digestive

organs, leafy vegetables and fresh fruits. In this way you will have a diet with all the vitamins necessary for the mother and her baby and it well balanced. During the first year of life the nursing child will get a sufficient amount of vitamins from the mother's milk. If bottle fed, should have fresh cow's milk and if it can be digested, it should be raw milk in order to retain the vitamins as much as possible. The fresher the milk the more vitamin it contains. If the cereals are added it should be made from the whole grain. Breast fed babies are helped by giving whole grain cereals after they are six months of age. This should be practiced with all babies that are breast fed that are six months, or older.

Fruit juices should be given from the third month on as an antiscorbutic measure. We now know tomato juice is just as good as orange juice. Green or leafy vegetables should not be left out until too late, and may be given in the form of puree and never later than the ninth month.

A very simple way in getting a gain in weight when the feeding has been pushed up to 80 calories per pound body weight with no gain is to add to the feeding one codded or soft boiled egg yolk. The gain from this egg yolk is out of all proportion to the number of calories added to the formula and can only be explained by the action of the fat soluble vitamins contained therein. This was carried out in a number of cases in the New York Postgraduate Hospital and the above conclusion was arrived at by that institution.

In private practice a child's diet should be watched until puberty, and should be made sufficient in bulk to prevent constipation, in calories to provide body and energy, in vitamins to insure proper growth. This diet should be carried out in institutions, whether orphan asylums, day nurseries, hospitals, fresh air camps, etc.

Other important features in preventing subnutrition in older children are sufficient but not excessive exercise in the open air, avoidance of thin broths and too much liquid at meals, sufficient time at meals, avoidance of candy between meals and no tea and coffee at meals.

The curative treatment of undernourishment may be undertaken by the physician or by public institution. It is better for the in-

*Read before the Second District Medical Society, Tifton, Ga., April 9, 1926.

stitution to handle this condition than for a private physician to undertake it as the institution can arouse the child-like love of competition and enable the instructions to be given a great number at a time. .

Emerson of Boston, thinks it is possible in private practice to utilize the class method successfully. Inasmuch as the successful treatment of any disease or abnormal condition depends on a knowledge of its causes and on removal when possible, it might not be amiss here to take up the causes of children from the runabout age to puberty.

The causes to be sought for and removed may be organic diseases or faulty habits of living and eating. Of the actual diseased condition, diseased tonsils heads the list in frequency and in seriousness. It has been but a few years since the diseased tonsils was disowned as a portal of entry for all sorts of systemic infections. Carious teeth are a very common factor in malnutrition but does not compare with diseased tonsils. Apical abscesses are uncommon and focal infection from teeth in children are uncommon. Special attention should be given to dental malocclusion with faulty developments of muscles of face, neck and scapula.

In the prevention and treatment of the undernourished there has not been enough attention paid to posture and weight bearing lines in the lower extremities. This should be done before the child begins to walk and his first shoes should be designed accordingly. If this weight bearing is not in normal direction, through the lower legs down to the base of the second toe, measures must be taken to correct it. This should be decided before the baby walks and his first shoes should be designed accordingly. Faulty leg and foot position will fatigue the muscles of abdomen, chest and shoulders.

Emerson in his recent survey in Walpole, Mass., of the children in that town found one-third of children undernourished; 80% had nose obstruction and 79% had "fatigue posture." Prevention and correction of postural defects are very important in handling of malnutrition in children.

Tuberculosis in childhood is usually glandular in origin and when glands are external can be readily detected. However, the groups

in chest and abdominal cavities often escape examination or detection. Here the D'espine's sign is of value when the whispering voice is heard below the 7th cervical vertebra. This should be verified if need be by the X-ray. Von Pirquet test for Tuberculosis after child is five years of age is of little value if it is positive. It is of great value if negative. Positive Von Pirquet under five is very significant of Tuberculosis somewhere in the body and this depends on the technique and tuberculin used.

When Tuberculosis is found actual or potential the child should be sent to country for rest and proper food, with cod liver oil given regularly.

Congenital lues may be suspected and treated as such, even in absence of positive Wassermann test. You will have signs, as Hutchinson teeth in second set, deformities of teeth and Keratitis and enlargement of olecranon gland. You will, as a rule, find some bone involvement, usually the nose or finger. Dactylitis is always due to syphilis or Tuberculosis. It is treated, if lues, by giving neoarsphenamine deep in the muscles of the buttocks once a week for eight or ten weeks. Mercury should be used once a week for five or six weeks in one-fourth grain doses hypodermically. You may use calomel t.i.d. over a long period.

Organic heart disease and rheumatism is simply a question of diet, rest and nutrition once the tonsils are removed. Intestinal parasites are very common in South and can be only diagnosed by finding the parasite or ova in feces. The so-called symptom of worms, such as picking at nose, grinding of teeth at night, screaming when asleep, bad breath, etc., have been shown by many observers and especially by DeBuys of New Orleans to be more frequent in children who have no intestinal parasites. When the parasites are seen or ova is found in stool, of course, active worm treatment should be instituted at once.

Various forms of infection should be looked for as organic heart disease, poliomyelitis, chronic nasal infection, appendicitis and diseases of any organ. When once found should be actually treated and a cure effected if possible.

The treatment in the private home of the

average home consist in removal of all removable organic defects. Correction of any error of hygiene and diet. Insist on proper rest during day. Raw milk, one quart per day is very essential in malnutrition and not so much of a thin broth that is so often used by a great many physicians. Be sure you have good ventilation, proper exercise, balanced diet with plenty of bulk to prevent constipation, calories in sufficient number and vitamins.

There is rarely ever any need for medicine in malnutrition. Give them the proper care and they will come to their normal condition without medicine. If these measures are followed and the proper diet is given it is astounding what results can be obtained without the use of drugs.

Even cod liver, as valuable as it is in malnutrition in childhood is rarely necessary if the above is carried out properly. One of the factors in the causation of malnutrition in children in the school age, is the irregular hours they have. They have no time for a meal, no time for bowel movement after the morning meal and that is the physiological time for it. Their lunch hour is so short and so early in day they do not get a sufficient meal and they get so very hungry before they get dinner. Then, too, it is a great temptation for the child to get candy at this time and spoil its appetite for dinner. This can be arranged and overcome by giving the undernourished children part time or keep them out of school until built up to the standard.

The greatest solution of this problem is preventive medicine, and it is the duty of the physician and especially the pediatrician, to guide every child when it is possible to health and happiness. To be successful this guidance must begin before the child is born and continued until the child arrives at an age when it can understand and look after its own welfare.

SUMMARY

1. Malnutrition is very common in the country. Most of it is unrecognized or at least untreated.

2. Prevention of undernourishment in children should begin with ante-natal care and instruction of mother, not only as to or-

ganic disease but also to the inclusion in her diet of vitamins necessary to the welfare of her unborn child.

3. During the first year of life malnutrition may be prevented, or, if present, treated, in the breast fed infant by the careful supervision of the diet of nursing mother with special reference to vitamins. If necessary supplemental or complementary feedings may be resorted to; which must be sufficient in vitamins as well as calories. Breast fed babies are benefited by the administration of cereals at six months and vegetables at the ninth month.

4. The bottle fed infant must be given a diet sufficient in bulk, calories and vitamins, cereal and vegetables should be added as early as in breast fed. Egg yolk may often turn tide in obstinate cases.

5. In older children undernourishment is caused by some organic disease or dietetic error and hygiene.

6. In older children after tonsils are removed, treatment of the organic condition when present, correction of dental caries and postural defect and proper diet and exercise.

They should have rest in bed from seven P.M. to seven A.M. Sufficient time for each meal and cleansing of hands before and teeth afterward. Avoid too much fluid at meal time. Drink one quart of raw milk each day. Rest for one hour in each afternoon.

SCHISTOSOME DERMATITIS IN UNITED STATES (MICHIGAN)

A species of schistosome cercariae *Cercaria elvae* was found by W. W. Cort, Baltimore (Journal A. M. A., March 31, 1928), to penetrate into the human skin and produce definite lesions of a papular and frequently pustular nature. This schistosome dermatitis was identified as the same condition as that contracted by wading at certain places near the University of Michigan Biological Station at Douglas Lake, Mich., where this and similar schistosome cercariae were known to be present. It is suggested that a dermatitis produced by the penetration into the human skin of nonhuman schistosome cercariae may have a widespread occurrence, since cercariae of this type have a wide distribution.

MODERN MANAGEMENT OF PNEUMONIA*

REPORT OF FOURTEEN CASES

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The history of the treatment of lobar pneumonia during the past century is most interesting. Todd in England and Dehier in France gave large doses of alcohol, while Rasori and Laennec used tartar emetic. Broussais and Bouilland practiced local and general bleeding. "It is recorded that Broussais in his own last illness ordered six venesections and the application of over sixty leeches to himself." This method was so popular in France that in 1824 about three hundred thousand leeches were applied, and in 1827 some thirty-three million. The rule was to bleed the patient until he was white. A little later Hirst of Nancy and Petrescu of Bucarest employed large doses of digitalis while Traube combined digitalis with venesection.¹

The next stage was the era of therapeutic nihilism and it was Skoda who pointed out that patients did just as well with nothing other than general care as when intensive therapy was employed. So in 1842 we see pneumonia treated with rest in bed and a simple diet. The result was a decided reduction in mortality. Osler and others of his day employed a general hygienic regime with symptomatic and expectant treatment. About 1908 it was usual to put the pneumonia patient out of doors in order to get the greatest possible amount of cold, fresh air. They were only brought in for the necessary treatments and examinations. Patients so treated got along about as well as they do now.

At the present time specific therapy is being tried. I shall return to a consideration of this later.

CASE REPORT

Case 1. Female, white, age 21. She had been ill two weeks prior to admission to hospital. Left lower lobe involved. In hospital 33 days. No complications other than delayed resolution. Discharged well.

Case 2. Female, white, age 17. Ill three days before admission. Left lower lobe in-

involved. No complications. In hospital 17 days. Discharged well.

Case 3. Male, white, age 18. Ill three days before admission. In hospital 24 days. Complications—severe toxemia, delirious and unconscious for several days and marked jaundice. Right middle and lower lobes involved. Discharged well.

Case 4. Female, white, age 28. Ill two days before admission. Had had pneumonia once before. Left lower lobe involved. In hospital 17 days. WBC 34,000 with 90% polys. In hospital 17 days. Discharged well.

Case 5. Female, white, age 71. Right and left lower lobes involved. WBC 12,500 with 90% Polys. In hospital 17 days. Discharged well.

Case 6. Female, white, age 16. Left lower lobe involved. In hospital 18 days. Pneumonia followed childbirth. WBC 18,500 with 81% polys. Discharged well.

Case 7. Male, white, age about 50. Right lower lobe involved. In hospital 22 days; had been ill more than a week before admission. A case of delayed resolution. WBC 18,000 with 67% polys. Discharged well.

Case 8. Female, white, age about 48. Cases 7 and 8 were husband and wife. Left lower lobe involved. In hospital 17 days. No complications. Discharged well.

Case 9. Female, white, age 32. Left upper and lower lobes involved. This patient developed empyema, was operated upon by rib resection. In hospital 12 weeks. Discharged well.

Case 10. Male, white, age 21. Right lower lobe involved. Ill two weeks. This patient not admitted to hospital. Discharged well.

Case 11. Male, white, age 21. Pneumonia followed influenza. The right middle and lower lobes involved first, then the left upper. Complications were myocarditis, pericarditis, and severe toxemia. In hospital 28 days. Discharged cured with no appreciable damage to heart.

Case 12. Male, white, age 19. Right lower lobe involved. Pneumonia followed influenza. In hospital 23 days. Discharged well.

Case 13. Female, white, age 18. Pneumonia followed otitis media. The right lower lobe involved. In hospital 30 days. Discharged well.

*Read before the Eighth District Medical Society, Elberton, Ga., August 10, 1927.

Case 14. Male, white, age 9. Right upper, middle, and lower lobes involved. Pneumonia followed influenza. Type 4 pneumococcus found in sputum. In hospital 24 days. Discharged cured.

These patients range in age from 9 to 71. There were 8 women and 6 men all of whom recovered. In two cases there were very serious complications, cases 9 and 11. The former had empyema with operation and the latter myo and pericarditis. Cases 1 and 7 were cases of delayed resolution. Cases 5, 9, 10, 11, 14 followed influenza. Case 6 followed childbirth, and case 13 otitis media. This I think shows that probably all types of pneumonia were represented in this series, i.e., pneumococcus, influenzal, and septic. The sputum was not typed in any except case 14. Specific therapy was used in no case.

MANAGEMENT OF THE TREATMENT OF THESE CASES

When possible the patient was isolated in a light, well ventilated room. All of my patients except one were hospital patients and all had the best of nursing although all did not have special nurses. It is desirable to have both a day and a night special nurse when possible. The usual routine of baths, cleansing the mouth, teeth, etc., was instituted.

The most important point to remember in the general care of the pneumonia patient is conservation of the heart. This is best done by securing absolute rest for the patient. This is the most important contribution of the nurse. The patient must not be allowed to turn in bed alone—he must be turned by the nurse; he must be fed by the nurse. He is not to be turned for sponge baths, only the accessible parts are sponged. It should go without saying that visitors are not allowed.

At the beginning of treatment a mercurial or saline purge was given provided the patient had not already been purged, but after this an S. S. enema every second day when necessary was used. The diet as a rule was liquid, soft diet being allowed in some cases. Feeding is not a proposition in uncomplicated pneumonia and we may feed as we like so long as we do nothing to prevent elimination. Fluids were forced to three or four thousand cc. in 24 hours. If the patient was unable to take this much by mouth it was given by rec-

tum, subcutaneously, or intravenously. Digifoline in fifteen minim doses was given every four hours to the majority of these patients. It has been shown that the digitalized heart does not dilate as readily as the undigitalized therefore digitalis is indicated in almost every case except the most mild.² A cool sponge bath was ordered every four hours for a temperature of 102.5 for every patient.

SYMPTOMATIC MANAGEMENT

Toxemia or rather "a lack of protective substances in the blood" is responsible for most of the symptoms of pneumonia. Myocarditis, dilatation of the heart, vasomotor paralysis, fever, delirium, etc., are due to this deficiency of protective substances. To combat it is the chief aim of treatment. The methods at our disposal are rest, water, fresh air and oxygen, and stimulation. In this series, as already stated, the windows of the sick room were kept open at all times except during examination and treatment, and water was forced to three or four thousand cc. in twenty-four hours. Cool sponging and morphia were used to relieve the delirium and restlessness when present. The patient was kept *absolutely* at rest in bed. Headache was not very often complained of, but an ice bag to head or back of neck was routinely used. In the majority of these patients digifoline in fifteen minim doses was given hypodermically every four hours. Oxygen was not used in any case.

Fever is an indication of the toxemia and of the resistance of the patient. A cool sponge for temperature 102.5 every four hours stimulates vasomotor tonus, allays nervousness, and incidentally reduces temperature. Under no conditions are antipyretic drugs indicated.

Pain is generally caused by an accompanying pleurisy and is usually relieved by an ice bag to the affected side or by a mustard and flaxseed poultice (1 part mustard to 10 of flaxseed). Such a poultice, since it does not irritate the skin, may be left on continuously, being changed only to warm. If these measures did not relieve morphia in 1/10 to 1/12 grain doses was given P. R. N.

The cough is at times most harassing, painful, and unproductive. In such cases heroin gr. 1/12 or codein gr. 1/4 was given every four hours. Expectorant mixtures are better

avoided. They only upset the stomach and so far as I am capable of judging do no good. To some of my patients I gave carbonate of ammonia in two grain doses every four hours but there was no beneficial effect from its use.

Dyspnea is probably due to the pain and toxemia, and probably also to lack of oxygen. We know that following the crisis the dyspnea ceases so it would seem that the toxemia has a great deal to do with it. There are no measures other than those outlined under toxemia for its relief.

Cyanosis has not been frequent in this series; in no case other than case 11 has it been marked. Oxygen according to the Barach₃ method and in some cases venesection is indicated and should be employed without hesitation. Barach investigated the various methods of using oxygen in pneumonia. He concludes that if oxygen is to be of any value it must be given so that the inspired air contains between 30 and 60% of oxygen. Most of the methods in use failed to accomplish this. He described a rebreathing apparatus and also a portable oxygen tent, both of which were satisfactory in that the percentage of oxygen could be accurately controlled and the required amount obtained.

As already stated there is nothing in the treatment of pneumonia of more importance than conservation of the heart. Myocarditis acute dilatation are especially apt to occur. Absolute rest in bed and digitalization are the usual means for the prevention of these complications. There are also oxygen, venesection, and quickly acting stimulants such as camphor in oil and coramine. Morphine and atropine are very valuable to secure rest as well as stimulation. Vasomotor paralysis may be prevented by cool sponging and combatted by pituitrin or adrenalin.

Tympanites frequently accompanies pneumonia, although in this series it was a cause of discomfort in only a few of the patients. It is due to paralysis of the intestinal musculature by the toxemia. I use turpentine stupes, enemata, rectal tube, and pituitrin when necessary.

To recapitulate—I would order the following for every pneumonia patient:

Absolute rest in bed (details).

Force water to 3000 or 4000 cc. in 24 hours. Liquid diet.

Cool sponge for temp. 102.5 every 4 hours (details).

Digifoline minims 15 every four hours (practically every case).

Ice bag to head or side or both.

Morphia grains 1/12 hypo. when necessary for pain.

Turpentine stupes for tympanites.

SPECIFIC THERAPY (LOBAR PNEUMONIA)

I am not personally familiar with any of the specific methods of treating lobar pneumonia. The following are being rather extensively tried:

Serums—Horse serum (antipneumococcus serum type 1 of Cole).

Huntoon's antibody solution.

Felton's concentrated solution.

Vaccines—Rosenow's vaccine.

Prophylactic vaccine (Austin and Cecil).

Chemicals—Quinine.

Mercurochrome.

The antipneumococcus serum, Type 1, was developed at The Rockefeller Institute by Rufus Cole and his associates. Up to 1923 there were 1,000 treated cases on record. These were reported in small numbers by different observers with a mortality from zero to 27%. According to Bloomfield₄ the prognosis seems to depend upon whether or not there is bacteriaemia. All patients with negative blood cultures treated at Johns Hopkins Hospital up to that time recovered; it mattered not on what day of the disease the serum was given. Those patients with positive blood cultures treated with serum did no better than a group of controls, though certain cases appeared to be saved by serum therapy.

Locke₅ collected 358 cases reported from military hospitals and 548 from civilian hospitals that were treated with Type 1 serum. The mortality in the first series was 9.5% and in the second 15.7%. These figures are considerably lower than the usual mortality rate for cases not receiving serum.

C. N. B. Camac₆ treated 244 cases with polyvalent serum obtained from The Rockefeller Institute. There were 34 deaths or a mortality of 13.9%. In a series of 252 cases not treated with the serum 107 died, a mortality of 29.8%. He is convinced that the serum is valuable.

Huntoon's⁷ Antibody Solution is practically a serum free aqueous solution of specific pneumococcus antibodies of Types 1, 2, 3. Cecil and Larsen report 834 cases of lobar pneumonia. Of these 320 were Type 1, 150 Type 2, 133 Type 3, 231 Type 4. Four hundred and twenty-four were treated with antibody solution and 410 used as controls. The results are shown in the following table taken from their article.

| <i>Serum treated cases</i> | | | |
|----------------------------|-----|--------|--------|
| | No. | Deaths | Rate % |
| Type 1 | 158 | 21 | 13.3 |
| Type 2 | 83 | 23 | 27.7 |
| Type 3 | 73 | 29 | 39.7 |
| Type 4 | 110 | 18 | 16.4 |
| | — | — | — |
| Total | 424 | 91 | 21.4 |
| <i>Control cases</i> | | | |
| | No. | Deaths | Rate % |
| Type 1 | 162 | 36 | 22.2 |
| Type 2 | 67 | 27 | 40.3 |
| Type 3 | 60 | 24 | 40 |
| Type 4 | 121 | 29 | 24 |
| | — | — | — |
| Total | 410 | 116 | 28.3 |

They conclude that the antibody solution is a valuable therapeutic agent, that it exerts its most marked effect on Type 1, some beneficial effect on Types 2 and 4, but none whatever on Type 3.

Kessel and Hyman reported 56 cases treated with Huntoon's antibody solution with a mortality of 34%.

Type 1—11 cases, 3 deaths, mortality 27%.

Type 2— 9 cases, 4 deaths, mortality 44%.

Type 3— 6 cases, 5 deaths, mortality 83%.

Type 4—17 cases, 4 deaths, mortality 23%.

Not typed—13 cases, 2 deaths.

Forty-one of those patients had sterile blood cultures; nine died, a mortality of 22%. Fifteen patients had positive blood cultures; ten died, a mortality of 66%. They conclude that the results are not encouraging enough to warrant the routine use of the solution in the treatment of lobar pneumonia.

Felton's concentrated antipneumococcus serum is a solution of pneumococcus immune bodies. It contains a small amount of horse serum and is from five to ten times more concentrated than Type 1 antipneumococcus serum. More than sixty cases were treated with

this solution at the Boston City Hospital with encouraging results.

The following paragraph is taken from the article by Baldwin and Cecil, Jour. A. M. A., Vol. 87, No. 21, p. 1709:

"The principle underlying these three specific agents is the same. All three derive their efficacy from the protective bodies which they contain, and they differ from one another only in their content of horse protein and in their degree of concentration of antibodies. All three when administered early have the faculty of preventing or checking pneumococcus septicemia, and when administered very early of producing an abortive pneumonia. These statements, of course, are applicable chiefly to Type 1 pneumonia. They are true to a less extent for Type 2 pneumonia, but there is no reason to suppose that any one of these specific agents can effect the cure of Type 3 or Type 4 pneumonia in man except possibly when they induce a non-specific 'shock' reaction."

It might be well to remind you that recently Huntoon has succeeded in removing much of the chill producing substance from his solution so that now it is possible to give large doses without the fear of severe reaction.

Rosenow¹ used partially autolysed pneumococci in the treatment of pneumonia. He gave 1.0 cc. daily until the temperature was normal and reports a mortality of 7% in 200 cases.

Reference: Austin and Cecil prepared a pneumococcus vaccine of Types 1, 2, 3 in about equal parts. They vaccinated 12,519 troops at Camp Upton, N. Y., and only 17 cases of pneumonia developed in this group. These men were observed for 10 weeks and the pneumonia mortality per 1,000 was 0.83, while in the unvaccinated troops it was 12.8 per 1,000. Vaccination to be of value would have to be repeated every year; this, of course, could not be done for the entire population, but would seem to be indicated in army camps, during epidemics, etc.

Reference: Young has collected 34 cases of pneumonia treated with intravenous mercurochrome. Twenty-six of these were cured or improved; in one the result doubtful, in one there was temporary improvement, and in six

no improvement. In experimental rabbit pneumonia he injected virulent pneumococci into the ear vein of a number of rabbits, after pneumonia had developed he succeeded in saving 50% of the rabbits with mercurochrome, while no rabbit in the control group recovered.

Quinine has been used in the treatment of pneumonia for many years. DaCosta supposedly advocated it as far back as 1884. Since then it has been used and recommended by many observers. Recently a quinine derivative, optochin, has been investigated and its use advised against because of danger to the eyes. The best method of administering quinine is intramuscularly. The following injection is satisfactory:

| | |
|-------------------------------|----------|
| Quinine muriate | 2 parts |
| Urethane | 1 part |
| Distilled water q. s. | 20 parts |

Five cc. of this is given and repeated every 24 or 48 hours. For details of quinine therapy the reader is referred to an article by L. F. Barker in the Virginia Medical Monthly, September, 1923.

I have presented this paper primarily to emphasize the importance of good nursing and careful supervision of the pneumonia patient. In view of what has been said in regard to specify therapy the author, had he adequate laboratory facilities for testing the sputum early in the course of the disease, would unhesitatingly and preferably use Cole's antipneumococcus serum, Huntoon's antibody solution, or Frasier's concentrated solution in the treatment of practically every case of Type 1 or 2 pneumonia. At the same time he would employ the treatment which he has used in the fourteen cases herein reported. In Type 3 pneumonia the sera are not indicated, nor are they advised in Type 4 pneumonia. There is much experimental work yet to be done before the physician in the country or small town or city can routinely and safely use the antipneumococcus sera. In regard to the vaccine therapy it seems to offer some hope, but so far Rosenow's vaccine is not available to the general practitioner. Mercurochrome should be valuable in the treatment of some cases of pneumonia, especially Type 3 and 4, and streptococcic.

CONCLUSIONS

Fourteen cases of pneumonia are reported, and the management of their treatment detailed.

The importance of good nursing and careful supervision of the symptomatic treatment of pneumonia is emphasized.

The specific therapy of pneumonia is reviewed. The sera are certainly very valuable in the treatment of Types 1 and 2 pneumonia, but so far there is really no specific therapy available to the physician who is not in close touch with an up-to-date laboratory.

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HOME TREATMENT IN PULMONARY TUBERCULOSIS*

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I deem it proper that I should preface this paper with an apology in that I am offering to you this evening nothing strikingly new or original, nothing ultra-scientific as viewed from the angle of the laboratory or experimental research, and nothing that in its essentials cannot be found disseminated throughout the current literature upon this subject. I am attempting only to present to you a regime for the home treatment in pulmonary tuberculosis that I have been employing here in Atlanta during the past four years. It is in no way a departure from the accepted dogma, but embodies perhaps some modifications as dictated by my observations and experience in this work. The very gratifying results that I believe have been obtained prompts me in making this presentation.

A proper understanding of the home treatment of tuberculosis is imperative for those

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who at all handle tuberculous patients, for not only is the home treatment instituted for those who follow this plan exclusively; but its intelligent adoption is necessary during those precious weeks while waiting for admission to the sanatorium, and in the after care of patients on their return from the sanatorium. I would like at this juncture to emphasize that the intelligent care and treatment of an individual with pulmonary tuberculosis is not ended when this individual is discharged from a sanatorium as arrested. I would almost go so far as to say it is just begun. A proper supervision of his daily routine, his work, his rest, is recreation, his personal hygiene and environment, his response to measured strain, is essential if he is to be given the best chance of avoiding a breakdown, and thus undo all that it has taken months and years to accomplish.

Wherever feasible I advise sanatorium treatment, as there is little question but that in the vast majority of instances it is preferable and possesses several advantages of merit. In the first place, there is a change—a change in surroundings, in climate, in food, in acquaintances; and frequently means a removal from an unwholesome environment, which is militating against recovery. It has frequently been observed that a change is beneficial in tuberculosis. At a sanatorium the patient is given the advantage of better equipment for treating the disease, and the advantage of better trained physicians in pulmonary work. By far the chief merit of the sanatorium, in my opinion, is the moral stimulus the patient receives. He realizes after he has made the resolution to “go away”—and this usually after much reflection on the expense, the separation from home ties, business contact, and friends—that he is entering upon the fight for health in earnest. At the sanatorium he sees others fighting the same battle. His feeling of self-pity is dissipated, and he becomes imbued with the spirit both of optimism and determination.

There is a large number of individuals, however; whether for social, financial, or domestic reasons, or because they are too ill to be moved; that it seems preferable to treat only in the home. My first move in putting a patient on the home treatment is to “line up”

their mental attitude, try to gain their confidence, their co-operation, and to instill into them a spirit of cheerfulness, determination, and perseverance. I acquaint them in some degree with the nature of their illness—get them interested in their “own” disease, without unduly alarming them. It is striking indeed, as you carry a patient along through his course, discussing from time to time the physical signs in his chest, the keen interest that he will manifest—an interest apart from him; but yet his very own. It is impressed upon them that there are no short-cuts in tuberculosis, that it was a long time in developing, and will be a long time in healing. They are taught to think in terms of months and years, and not in days and weeks. They are given to understand that tuberculosis does not run a regular course, even in the most favorable cases; and they may expect periods in which they apparently seem not to do so well. A co-operative spirit in many individuals is augmented by furnishing them with selected literature upon tuberculosis, such as the admirable little book by Dr. Lawrason Brown, “Rules for Recovery from Tuberculosis,” or with copies of “The Journal of Outdoor Life.” After this, what I speak of as getting the patient “lined up” has been properly and satisfactorily done, the most important phase of the treatment, in my opinion, has been accomplished.

The character and location of the home which the patient with tuberculosis is to be treated is important; but only in exceptional instances is this a matter of selection. It is preferable that the house be elevated, on a dry foundation, and away from the smoke and dust of the city. The patient's room can usually be selected, and the ideal one is a large, bright room with high ceilings and cross ventilation and light. For the sake of keeping the room easily clean, and to increase the ventilation, all unnecessary articles of furniture, draperies, hangings, rugs, etc., should be removed. A balcony or sleeping porch adjoining is most desirable, and here a patient can spend many hours in the open air. The windows of the room should be kept open day and night, permitting all the available fresh air and light to enter.

The essential feature in the treatment is

rest—both mental and physical. The best way to secure rest is in bed, and all patients with tuberculosis who are running a fever (a persistent temperature of 99° or over), or who run a persistent tachycardia (a pulse rate of 90 or over while at rest), should be put at bed rest. They should be kept in bed until the temperature and pulse rate show a return to normal and remain there for a minimum of a few weeks. I rarely shorten the initial bed stage to less than three months, regardless of how promptly the fever disappears. It is not uncommon for a patient to be in bed six months to a year before his temperature returns to normal. In very sick patients, and in bleeding cases, the rest in bed should be absolute rest, not permitting the patient to feed himself, or to expend the slightest unnecessary energy. With the bed patient much company, loud talking, and laughing, is to be discouraged. Such indulgences frequently precipitate a paroxysm of coughing. The only useful cough in tuberculosis is that which produces expectoration. All other coughing is an unnecessary strain. It has been calculated that a hard day's coughing is equivalent to the energy expended in climbing a mountain. Tuberculous patients readily acquire a habit of coughing, and this can frequently be controlled by securing the proper co-operation from the patient. There is no better cough mixture than bed rest; but when the cough is excessive a cough preparation may be indicated. They are rarely required for any great length of time in the average uncomplicated case. Attempts at local rest may be secured by placing a small sandbag, or some other pressure appliance, upon the most affected side. These cases should be rather carefully selected. Strict vocal rest should be enjoined in all cases that are hoarse or show any evidences of laryngeal involvement. A febrile bed patient I permit to read and write in prescribed amounts, but do not permit it in the patients who are running a fever. The radio has proved a valuable boon to the bedridden patient. A quiet period of two hours after the midday meal is insisted upon, during which time no activity (company, reading, taking of temperature) is permitted. The patient is urged to relax and to slip off into a nap, if he can. This quiet pe-

riod in bed is also prescribed for the patients who are up in the chair.

After the initial bed rest period, varying from three to several months as a general thing, the patient is allowed up gradually in a chair. He begins with a few minutes a day, and increases slowly until he is up practically the whole day, except for the quiet period of two hours after lunch. The entire process is controlled by the patient's reaction—his temperature, pulse, cough, etc. During the chair period the patient should spend most of his time in the open air, the garden, or the porch, and at other times in his room with the windows open. Added clothing and blankets can keep him comfortable in cold weather. I usually keep the average patient in this stage—the chair stage—from one to three months, and then he enters upon the phase of graduated exercise.

This exercise is in the form of walking at first, and walking serves chiefly as exercise of choice throughout, beginning a few minutes the first day, and increasing gradually—very gradually—the first two weeks. The patient should walk slowly, and preferably at first upon the level. This measured exercise is, as before, kept carefully controlled by the temperature, pulse, and general symptoms. Should exercise produce a rise in temperature, or bring on increased cough or expectoration, then it is taxing the patient too much and will have to be reduced or omitted. In tuberculous patients all violent exercise should be forbidden, the exercise of choice being walking, croquet, motoring, and in well arrested cases golfing and dancing in moderation. The stage of measured exercise should be as prolonged as possible, and step by step gradually leads up and merges into the patient's return to a normal, but modified, life. He should know now how to take care of himself, what are the danger signals that call for a slowing down, or even a few days or weeks in bed. His occupation, if he returns to one, should be light and agreeable, and he should report for a periodic examination, as a rule, about every three months.

Throughout the whole routine of home treatment regularity is essential. The temperature should be taken morning, noon, and night, and a record kept for the attending

physician. Every patient should be taught to take his temperature, and instructions given to the patient and family as to disinfection and in the disposal of sputum and other discharges. The bed patient is given a tepid sponge every morning, and an alcohol and talcum rub at night. After the patient is up, three tepid tub baths or showers a week are permitted. Very hot and very cold baths are advised against, as a rule. The diet should be a general wholesome one, with milk between meals, where not objectionable. Plenty of fresh vegetables and fruit, and bran cereals, aid in overcoming a tendency to constipation when the patient first goes to bed. Overfeeding, or stuffing, particularly in the sick febrile cases, is to be strenuously avoided. Much can be done to boost a flagging appetite by preparing the food attractively, and by varying the menu. Keeping late hours at any stage of the treatment is to be discouraged, the patient retiring for the night not later than ten o'clock.

Finally, a few words about the least important phase of the home treatment—and that is drugs. There is no specific drug and they are used only for symptomatic indications. As mentioned above, a cough preparation may be required. A tendency to constipation in the bed patients frequently calls for the exhibition of a laxative. One of the Agar mineral oil preparations seems to fill a useful purpose here. Cod liver oil, or some other tonic or restorative, is beneficial at times. Some form of calcium seems to be of benefit in the blood spitting cases. A combination HCL and essence of caroid has given me good results in some of the patients with dyspeptic disturbances. Occasionally an opiate will be required to give relief in acute pleuritic pains, or to allay the excessive cough in the advanced or terminal cases.

In conclusion, should state that the broad scope of this subject, with its almost countless details, has precluded a thorough survey of some important phases, and even the mention of others. It would be my pleasure in any ensuing discussion to attempt to rectify this delinquency.

INTRALIGAMENTOUS PREGNANCY*

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Macon

Extra-uterine pregnancies are not unusual. The further growth and development of the ovum to near term, in the broad ligament after its probable expulsion into the ligament from a ruptured tubal pregnancy, is rare. The rarity of the condition, and the unusual features of the case, justify the addition of the following report to the small list of similar ones found in the medical literature.

Williams, in his discussion of tubal pregnancy (Williams' Obstetrics, Fourth Edition) says that, "in a small number of cases, rupture may occur at a portion of the tube uncovered by peritoneum, so that the contents of the gestation sac are extruded into a space formed by the separation of the folds of the broad ligament. Generally speaking, this is the most favorable variety of rupture, and may terminate either by the death of the ovum and the formation of a broad ligament hematoma, or by the further development of the pregnancy.

The outcome depends largely upon the degree of completeness with which the placenta has been separated. If it still remains attached to the interior of the tube, it generally becomes displaced upward as pregnancy advances, and comes to lie above the fetus; but when it is situated near the point of rupture it gradually extends down between the folds of the broad ligament, being implanted partly upon the tube and partly upon the pelvic connective tissue. In either event the fetal sac lies entirely outside of the peritoneal cavity, and as it increases in size the peritoneum is gradually dissected up from the pelvic and abdominal walls."

CASE REPORT

Pearl, R., I-para, age 20, was admitted to the obstetric clinic, Macon Hospital, May 16, 1927. Her menstruation began at 13, was regular and normal. Married five years. Her general health had been good except a pelvic inflammatory condition three years ago that necessitated an operation at which time the left tube and ovary were removed and adhe-

*Read before the Sixth District Medical Society, Griffin, Ga., November 30, 1927.

sions broken up between the right tube and ovary. Her last menstrual period occurred on Oct. 20, 1926, and was given July 27, 1927, as the probable date of delivery. Before coming to the clinic she had constant pelvic discomfort, was nauseated and constipated. Fetal movements were rarely felt. She considered that the discomfort was part of the pregnancy and did not seek relief until her lower extremities became markedly edematous.

Examination revealed a fairly well nourished colored female with marked edema of vulva and lower extremities. There was no edema involving the face or upper extremities. Heart and lungs negative. B. P. 130/90. Palpation of the abdomen revealed two masses. One large movable mass extending two inches above the umbilicus, the other which was harder and apparently fixed to the larger mass extended from under the symphysis to within three inches of the umbilicus. Fetal heart could not be heard, or fetal movements elicited. Vaginal examination revealed a markedly edematous vulva, normal vagina and cervix in normal position and very soft. The hard mass felt above was apparently a continuation of the very resistant mass found filling the pelvis. Urinalysis showed: albumen, semi-solid; sugar, negative; pus, few cells; both fine and coarse granular casts. Wasserman negative. The impression of the case at this time was: Fibroid complicating pregnancy. Pre-eclamptic toxemia.

The patient was requested to return the following day for x-ray examination. She did not comply to the request and was lost sight of until found in a serious condition by the visiting nurse on June 6, and brought back to the clinic. Her blood pressure had increased to 184/100; edema had increased in amount and was now involving the entire lower abdomen; was complaining of severe headache and disturbance of vision. She was admitted to the ward (Dr. O. S. Spivey's service) and eliminative measures immediately instituted. X-ray examination of the lower abdomen showed the presence of a fetus with its breech resting deep in the pelvis in the R. S. P. position. In spite of rest in bed, low protein salt-free diet, saline catharsis and alkaline diuretics, the patient's high blood pressure, edema and urinary findings persisted. An attempt at induction of labor, by the insertion of catheters into the cervix, was unsuccessful on account of the edema of the vulva and vagina. The cervix could not be found. The eliminative treatment was continued, hoping to reduce the edema so that a successful induction could be carried out. Her blood pressure remained between 180 and 200 systolic, with a

diastolic never going below 130. Urinalysis continued to show 3 plus albumen, pus and casts, with an occasional red blood cell. A second attempt at induction was made on June 22nd and a third on June 25th. Both attempts were unsuccessful. The visiting physician in charge of the service, realizing that delivery by the natural passage was impossible, called for a consultation, and after reviewing the case we decided to deliver by performing a section. The apparent toxic condition that had been going on for more than six weeks had made the patient a poor surgical risk. She was transferred to my service for operation.

Operation July 5th. The abdomen was opened by long incision to the right of the umbilicus. On opening the abdomen, the uterus which was about the size of a large orange and attached to the lower left surface of the larger mass, presented in the incision. It was then obvious that we were dealing with an extra-uterine pregnancy. The fetal sac was lifted out of the peritoneal cavity for careful inspection before opening. There were no adhesions between the omentum, intestines and sac. The sac was apparently made up of dense fibrous tissue, its peritoneal covering was continuous with that from the right broad ligament which was stretched, fan-like over the lower anterior surface of the sac. The lateral and posterior part of the sac was firmly attached to the right side of the pelvic inlet and promontory. Structures that might have been considered the remaining tube and ovary could not be found. The anterior surface of the sac presented an interesting picture. There were many blood vessels coursing in all directions over an area about the size of a normal placenta. Several large sinuses coursed in the direction of the right broad ligament. The sac was opened by cutting through the nest of thrombosed blood vessels which proved to be the maternal surface of the placenta. The placenta had been drawn upward on the anterior surface of the sac by the growing ovum. A badly macerated male fetus, weight 5½ pounds, was removed from the sac along with about 10 ounces of yellowish-brown semi-solid material. The inside surface of the sac was granular. The entire sac could not be removed because of its firm attachment to the right side of the pelvic inlet and posterior wall of the uterus. The upper part including the entire placenta was removed by clamping and tying off with mass ligatures, leaving the lower part, which was firmly adherent in the pelvic cavity, to be taken care of by nature. Two large cigarette drains were left in the pelvis and the abdomen closed in the usual manner.

The fetus, as far as could be ascertained in the gross was well developed and well nourished for one of that period of gestation. The only deformity present was a bilateral talipes equino-varus. Maceration was marked.

Seventy-two hours following the operation the patient's edema had entirely disappeared, blood pressure had dropped to 140/90 and her urine showed only 2 plus albumen. On the fourth day there was a free bloody drainage which was apparently checked by the injection of several ampoules of coagulin. Drains were removed on the sixth day. The patient was discharged from the hospital on the 29th day, incision healed, blood pressure normal and urine showing only a trace of albumen.

The patient was re-admitted to the ward on Aug. 29th, with a diagnosis of intestinal obstruction. At the operation the pelvis was found completely filled with loops of the small intestine, firmly held together by dense bands of adhesions. The obstruction was released by severing the adhesions. Pelvis drained. Several days following the operation there appeared a fecal drainage that has persisted. The patient, at the time of this report, with the exception of a small fecal fistula, is in fairly good condition.

CHILD GUIDANCE AS A FACTOR IN PSYCHIATRIC PROBLEMS*

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We have been faced so long with apparently insuperable problems in end results that we have begun more and more to cast about for some form of solution. This impasse in the light of our present knowledge and lack of knowledge has led us to focus attention upon the possibility of striking at the source of the problem. This has led in turn to a trend more and more toward preventive medicine. So we find in every field of endeavor in medical practice there is a tendency to stress preventive measures.

There is no branch of medicine where dealing with end results presents such a disheartening outlook as in the handling of so-called mental disorders; that field of medicine covered more particularly by psychiatry. This not only presents a tremendous medical prob-

lem but an economic problem which no man can side step. In a recent statement made by Dr. Wm. A. White, Superintendent of St. Elizabeth's Hospital in Washington, D. C., he says that counting all the beds in hospitals of every kind in this country, one in every two is devoted to the treatment of mental disorders. In other words there are as many beds for mental disorders as there are for all other types of disorder put together. I should like to pause for a moment for this tremendous statement to go home. And this is only accounting for those cases which, acute or chronic, stand most in need of hospitalization, for we nowhere have adequate facilities for caring for all. It does not take into account the large army of unfit or partially fit who somehow muddle along without adequate attention.

With the number of chronic cases increasing yearly the economic burden upon the state, the necessity for some solution of the problem forces itself upon us. Here, too, the necessity for some form of preventive medicine is evident. Some type of mental hygiene which strikes at the source of supply is the only adequate weapon now available. This movement is practically in its infancy or as yet unborn as in the State of Georgia. It is in a more or less experimental stage. It has not been in practice long enough to make all its possibilities evident but is old enough in some sections of the country to demonstrate that it is a powerful weapon and an economic saving. The rationale of the movement is beyond possibility of contradiction though individual endeavor may be open to criticism.

Here in Georgia with our state institution taxed to capacity so that it becomes necessary to close its doors and use the jails and almshouses, the necessity for some kind of awakening is imminent. We have not even made a beginning. We are not even caring for our end results much less attempting to eradicate cause.

At a large auditorium in a denominational assembly ground there is written over the platform, "The Church moves forward on the feet of little children." This might be paraphrased to read, "Mental sanity moves forward on the feet of little children." So we find that the most potent factor in mental hygiene as an

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effort to prevent the inception of mental aberrations is the so-called child guidance.

The term child guidance covers a tremendous field. It means the co-ordination of a great many agencies. In fact it covers every branch of medical and sociological activity. There is no specialization in medical practice which is not involved. The problem is twofold: an attempt to prevent or eradicate physical abnormality which may disturb nervous equilibrium; and an attempt to inculcate principles of right habit formation or correct early in life beginnings of faulty adaptation.

The problem of physical abnormalities goes back to parenthood. Many cases of congenital defectiveness, of nervous instability can be traced to disease condition: infectious, physiological, and nutritional disorders, present in the parent. Probably nutritional disorders play as large a part as any. So the problem starts here with the obstetrician. After birth the prevention and eradication of physical defects which would contribute to nervous imbalance comes within the scope at some time of every medical practitioner. It starts with the pediatrician and goes through the whole gamut of specialization.

Here the problem is only half solved, for given a reasonably perfect physical mechanism, there is still a liability in improper habit formation. This problem is both psychological and sociological. We train men and women in various vocations whereby they may earn a livelihood but we do next to nothing to teach them to be parents. We breed our livestock and control their environment on a much higher plane of scientific endeavor than we do our own offspring. The majority of children are accidents, born into a haphazard, hit-or-miss environment. The question of survival of emotional balance is largely a matter of chance. Here proper education in methods of inculcating proper emotional control; the avoidance of emotional habituation by avoidance of emotional atmosphere chronically in adolescence; and general sanity in child rearing is most potent. Life should be neither too hard nor too easy in its beginnings and the striking of a happy medium is a delicate matter which must be more or less fitted to each individual case in a commonsense manner.

We do not propose by these methods to

displace the home. The home is fundamental in our present economic system and best results proceed from the proper kind of home. What is proposed, however, is an attempt to make the home more effective when possible. The problem of rearing children cannot be left to instinct. It should be guided as are all other acts by experience. Growth and betterment of methods can be attained only by a multiplication of individual experience for the benefit of everyone concerned. That is the only way to make progress in any endeavor. Individual experience alone is inadequate. But by co-ordinating and recording individual experience and passing these on to future generations progress may be obtained.

On the other hand there are instances when a substitute for the home must be found. This occurs more particularly with orphaned children and where the so-called home is of such a character as to make proper reformation into an adequate environmental factor impossible. This latter condition unfortunately is all too prevalent and constitutes the larger problem. For it is from this source that the state draws its heaviest economic burden of misfits: criminals and mental abnormals.

So the whole problem, whether physical or mental, boils down to a control of environmental factors in the beginning. This means environment in the broadest sense, both endogenous and exogenous. This begins prenatally and is most potent throughout the formative period; that is, up to the age of fourteen to sixteen. Dorsey has said that, "Mohammed, born on Beacon Hill, would probably have gone to Harvard and been a Unitarian." John B. Watson in his well-controlled experiments on growing children has pretty well proven the poverty of inheritance factors in personality make-up. Perhaps he may go a little too far but at all events he has brought out most forcibly the tremendous influence of environment in its broadest sense upon future behavior. Of course as shown earlier in this paper this environmental influence may be a factor in congenital anomalies. And congenital anomalies have a tremendous influence upon personality. None of this consideration is concerned with those sports of nature—those freaks which apparently appear without rhyme nor reason but whose reasons in truth

we have not yet fathomed. The number of combinations and permutations inherent in personality make-up makes it impossible to predict beyond peradventure but is self-evident that environment properly controlled will give the best possible results.

This tremendous problem of child guidance by a proper liaison between the agencies of education and medical control; namely, social agencies, scholastic agencies, psychological guidance and strict preventive and corrective medicine, in its solution is the only rational cure for our mental ills. The economic problem involved therein is not nearly so monumental as that involved in the constantly increasing demand for care for end results. It is a surprising fact that a comparison between the birth rate and the rate of increase of mental disorders would lead logically to the conclusion that within a century there will be more insane than sane individuals. We hope that this is a *reductio ad absurdum*.

"There will be delinquents, abnormals, subnormals as long as breeding-grounds for such are regarded as normal by-products of social organization. The entire substratum of misfits will disappear only when the environment is so changed that misfits do not form part of its normal output." The eradication of the substratum of misfits can be obtained only by a slow process of education in child guidance so that mental sanity may move forward on the feet of little children.

POLYCYTHEMIA VERA

The data presented by Clair L. Stealy, San Diego, Calif. (Journal A. M. A., April 21, 1928), in connection with the case reported seem to show that: 1. The erythrocyte count may be kept near normal limits by the administration of 2.1 Gm. of phenylhydrazine during each period of medication, this amount being divided into doses of 0.1 Gm. a day; and that, following the ingestion of 2.1 Gm. of phenylhydrazine, the drug may be safely discontinued for one and one-half months. 2. It may be possible to use the increase in leukocytosis as an index in administering the drug since the rise in the white cell count precedes the fall in the red cell count, although the decrease in the red cell count is not proportional to the increase in the white cell count. 3. The patient did not acquire any tolerance to the drug. 4. Phenylhydrazine hydrochloride administered in the dosage used in the case reported apparently does not have any deleterious effect on the liver.

STUDIES ON THE WASSERMANN TEST

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Although the supremacy of the Wassermann Test has been somewhat shaken by the remarkable showing made by the Kahn Precipitation Test for syphilis, it will for a long time hold a commanding position in our diagnostic armamentarium. Much of the criticism which has been directed against the test will not stand examination. On the other hand it seems entirely natural that a test so delicate, involving the interaction of so many unknown substances, should give different results in different hands. This study is directed at one component of the test, the anti-sheep hemolysin.

It seems fashionable in some quarters to deride the theories of Ehrlich. The word "amboceptor" in particular excites the ire of certain persons. As for us we see no greater error in the use of the word "amboceptor" than in the use of the geographic term "West Indies." It certainly is not open to the same objection as is the use of the term vitamin. At any rate we will use the term just as it pleases us at the moment without committing ourselves to the side chain theory in its cruder form.

It has been known for a long time that a large proportion of the specimens of human blood which are submitted for the test contain a specific hemolysin for sheep cells. As early as 1909, for example its presence in 53% of a fairly large series of samples was reported. This finding has been corroborated many times since and indeed has led to modifications of the original Wassermann Test. The first of these involves the removal of this specific hemolysin by its adsorption on sheep cells in the absence of complement. The second escapes the difficulty by the use of beef cells with an appropriate hemolysin. The first method is based on the fact that there is an

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actual affinity between the hemolysin and the sheep cells strong enough to remove the great part of it from serum. The disadvantage of this method is that it practically doubles the work involved in the test. The second method is based on the fact that a specific anti-beef hemolysin is much less frequently found. An interesting subject for speculation is the question of the relation between this fact now well established, and the fact that of all foods which have been tested, beef has been found to be the least often the subject of a physiological idiosyncrasy. The difficulty in the way of the general substitution of beef cells has been the difficulty in manufacturing a suitable hemolysin.

In order to learn something of the frequency with which this native immune body occurs in the samples of human blood coming into our hands, we tested more than two hundred routine specimens of serum for the presence of anti-sheep hemolysin and anti-beef hemolysin. More than 60% of the specimens contained in 0.1 cc., an amount of anti-sheep hemolysin equal to or greater than the amount we use in the test. Whereas only three of the specimens contained a demonstrable amount of anti-beef hemolysin and in none of these was there enough to hemolyze completely an appropriate dose of beef red cells. One of us (E. L. W.) tested 500 routine specimens of serum submitted to the State Health Department's Serologic Laboratory for the presence of anti-sheep amboceptor and found that but 20 of the specimens (4%) were entirely free from it, while 368 (74%) showed it in such amounts that 0.1 cc. contained an efficient dose.

A physician complained that the laboratory had given repeated negative reports on the blood of a patient who was very definitely suffering from syphilis as shown by the clinical signs and the therapeutic test. Examination of this patient's serum showed that anti-sheep hemolysin was present in such quantity that 1/80 cc. of the inactivated serum was sufficient to produce complete hemolysis of the amount of red cell suspension used in the routine test. This means that the 0.1 cc. used in the routine test contained of itself eight times as much hemolysin as was necessary for the test, making the total amount nine times

what it should be. Since this patient had been thoroughly treated the Wassermann was, of course, negative even after the native hemolysin had been adsorbed. A second physician made the same complaint and it was found that 0.01 cc. of his patient's serum contained an efficient dose of hemolysin. It will be seen that in this case the routine test was done with eleven times the proper amount of hemolysin.

As a result of these experiments 145 routine specimens which had been found negative were submitted to treatment with sheep cells (one-fourth cc. of packed cells to one cc. of inactivated serum, shaken up and put in the water bath for 30 minutes and then centrifuged) with a result that 20% of them showed some degree of inhibition of hemolysin.

It was then determined to try to find out the quantitative relation which exists between the amount of hemolysin present and the result of the test. A sample of amboceptor which we had in the laboratory was of such strength that 0.001 cc. contained the efficient dose for the test. Six tubes were set up for each specimen of serum to be tested. Using a pipette graduated in thousandths, 0.001 cc. of the concentrated amboceptor was added to the second tube of the series, 0.003 cc. to the third tube, 0.007 cc. to the fourth tube, 0.015 cc. to the fifth tube, 0.031 cc. to the sixth tube. It will be seen that when a series of tests on the same sample of serum was performed in this set of tubes the addition of the regular dose of sensitized cells brought it about that the tubes contained hemolysin in the ratio of 1, 2, 4, 8, 16, and 32 times the normal amount. At the same time it is to be noted that the addition of even the largest amount did not materially change the relative proportions of the other reagents in the test, for even 0.031 cc. of amboceptor does not greatly change the proportions in a total volume of 2.0 cc. And inasmuch as the serum to be tested was put in the tubes directly on the hemolysin, which in each case had been directly pipetted to the bottom of the tube, the conditions simulated those existing in the case of presence of immune serum (natural). A series of Wassermann positive specimens was then submitted to test with the following results:

TABLE I

| Tube No. | | 1 | 2 | 3 | 4 | 5 | 6 |
|------------------------------|------------|---|---|---|---|----|----|
| Relative amount of hemolysin | | 1 | 2 | 4 | 8 | 16 | 32 |
| Specimen No. | Orig. Res. | | | | | | |
| 63 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 1909 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 84 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 95 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 31 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 80x | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 6x | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 60 | 4 | 4 | 4 | 4 | 4 | 4 | 3 |
| 7 | 4 | 4 | 4 | 4 | 4 | 4 | 3 |
| 6 | 4 | 4 | 4 | 4 | 4 | 4 | 3 |
| 11 | 4 | 4 | 4 | 4 | 4 | 4 | 0 |
| 40 | 4 | 4 | 4 | 4 | 4 | 3 | 3 |
| 90 | 4 | 4 | 4 | 4 | 4 | 3 | 3 |
| 81 | 4 | 4 | 4 | 4 | 4 | 0 | 0 |
| 91 | 4 | 4 | 4 | 4 | 3 | 2 | 1 |
| 27 | 4 | 4 | 4 | 4 | 3 | 2 | 1 |
| 2004 | 4 | 4 | 4 | 4 | 3 | 2 | = |
| 91 | 4 | 4 | 4 | 4 | 3 | 2 | = |
| 11 | 4 | 4 | 4 | 4 | 3 | 0 | 0 |
| 68 | 4 | 4 | 4 | 4 | 0 | 0 | 0 |
| 99 | 4 | 4 | 3 | 3 | 3 | 3 | 2 |
| 22 | 4 | 4 | 3 | 3 | 2 | 2 | = |
| 54 | 4 | 4 | 3 | 3 | 1 | 1 | = |
| 78 | 4 | 4 | 3 | 3 | 2 | 1 | = |
| 33 | 4 | 4 | 3 | 2 | 2 | = | = |
| 9 | 4 | 4 | 3 | 2 | = | = | = |
| 28 | 4 | 3 | 3 | 3 | 2 | 1 | + |
| 36 | 3 | 3 | 2 | 2 | 2 | + | = |
| 80 | 3 | 3 | 2 | 2 | 2 | 0 | 0 |
| 26 | 3 | 3 | 2 | 2 | 1 | 1 | + |
| 80y | 3 | 3 | 2 | 1 | = | 0 | 0 |
| 86 | 3 | 3 | 1 | + | + | = | = |
| 33 | 3 | 3 | 1 | = | = | = | = |
| 59 | 3 | 3 | + | + | = | = | = |
| 85 | 3 | 3 | = | = | = | = | = |
| 32 | 3 | 3 | = | = | = | = | = |
| 70 | 2 | 2 | = | = | = | = | = |
| 34 | 1 | 1 | = | = | = | = | = |
| 38 | 1 | 1 | = | = | = | = | = |
| 54 | 1 | 1 | = | = | = | = | = |

+ Doubtful
= Negative
0 Insufficient material for the test

It is to be noted that the only difference between the first tube in this set of tests and the original test was that the specimen had been kept in the ice box over night.

Inspection of this table shows some interesting facts. In the first place, there was a very close agreement between the two normal tests performed on the same sample on successive days. But the specimens showed a very marked difference in their ability to withstand the addition of excessive amounts of hemolysin. In about 20% of the cases, the final result was not changed even by the presence of such a relatively enormous quantity of hemolysin as 32 times the normal dose. But others of the strongly positive specimens be-

haved differently. Three specimens remained four plus in the presence of 16 times the normal dose, but became three plus with 32 times as much. Two specimens withstood eight times the normal dose without change, five withstood four times. Just here there is a break. Perhaps if we had had a larger number of specimens we would have found some capable of withstanding the double dose but no more. One specimen which had been four plus on the original test gave three plus on the retest up through the third tube.

The specimens which had given a reading less than four plus on the original test behaved in a different fashion. None of them was able to withstand even the doubling of the normal dose of hemolysin without change. Almost one-half of them became straight negatives in the second tube.

From the theoretical standpoint there is a very serious weakness in this experiment. To make it logically complete the specimens should have been titrated for the presence of native hemolysin. The fact that they were not brings it about that we are dealing not with actual quantities but with minimum quantities of hemolysin. In other words any given tube contained at least the quantity of hemolysin indicated by its position in the table, but it may have contained more, how much we do not know. On the basis of the two cases cited, the maximum possible quantity would have been 41 times the normal dose. While this weakness is to be regretted it does not vitiate the final result.

Since performing this series of tests we have been checking our Wassermann tests against the Kahn and have noted a considerable number of specimens which were negative to the Wassermann test but have been straight four plus to the Kahn. In view of what has been said it is plain that these specimens should be tested for the presence of native hemolysin. All that have been tested so far have shown the presence of fairly large amounts of this substance. The possible meanings of this experiment will be diseussed later.

A PROBLEM IN CHEST DIAGNOSIS

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Even in this day of scientific medicine, the diagnosis of the diseases of the chest is difficult; and if the disease fails to present certain well recognized groups of symptoms, signs, and laboratory findings, then oftentimes absolute diagnosis is possible only at autopsy. Recently a case of this type came under my observation, and it proved of such interest that I am presenting it to you.

Chief Complaint and Present Illness: Mrs. J. R., a white woman, aged forty-four, was admitted to the medical ward of the Georgia Baptist Hospital on November 8, 1927, complaining of a dull constant pain in the left chest and cough. The present illness began in May, 1927, with a hacking non-productive cough which continued for four and a half months before she consulted a physician. At that time, September, 1927, she was found to have a temperature of 101° , together with the signs of a pleural effusion in the left chest and a few scattered rales in the right base. The chest was tapped several times and on each occasion considerable clear, serous, yellow fluid was recovered in which no tubercle bacilli could be found. X-ray of the chest after the last tap revealed what was considered "characteristic evidence of malignancy of the lung." Following those tapplings, the patient ran a normal temperature, gained in weight, and improved generally. The pain in the chest and the cough ceased. She remained practically well for three weeks when she became very short of breath and the pain and cough returned. She also complained of general asthenia. At this time she came to Atlanta and was placed in the Georgia Baptist Hospital. The pain was then described as being general over the left chest and shoulder and was still dull and constant, being aggravated by the movements of respiration and cough. The cough was now very slightly productive of a thick, mucoid sputum. There was no hemoptysis.

Family History: The family history was essentially negative except for these facts: one grandfather died with cancer of the stomach,

one grandmother died of nephritis, and one brother died as the result of hypertension.

Marital History: The patient had been married eighteen years, and had one son living and well, and had one miscarriage many years ago.

Habits and Occupation: Her habits were good and she performed the duties of a housewife.

Past History: The past history is very important as it paves the way to a possible presumptive diagnosis. The patient was born in Pennsylvania and had moved to south Georgia within the last ten years. She suffered the usual diseases of childhood. She also had pneumonia at the age of six years and typhoid fever at sixteen years of age. One year ago she was said to have had post-operative pneumonia. She had never been exposed to tuberculosis as far as she knew and had always been a strong, healthy woman.

In June, 1926, a supravaginal hysterectomy was performed under ether anesthesia on account of an apparently uncomplicated fibroid tumor the size of a five-months pregnant uterus. She made an uneventful convalescence.

The past history of the cardio-respiratory, gastro-intestinal, genito-urinary, and neuromuscular systems, as well as the catamenia, was essentially negative except for the points brought out in the present illness.

The patient's average weight was 135 pounds and there had been no loss in the last six months.

Physical Examination: The physical examination revealed a well-developed and well-nourished woman of good appearance and young-looking for her age, lying on her back in bed, conscious and rational, slightly cyanotic and moderately dyspneic. Her frequent cough was nonproductive and seemed to aggravate the pain in the left chest. The head, eyes, ears, nose, throat, and teeth showed no abnormality. The tongue was not coated; there were no glands palpable in the neck, and the thyroid was not enlarged. The thorax was symmetrical and of normal size and shape. Expansion was very limited on the left and the respirations were regular, shallow, and twenty-nine per minute. The breasts were rather large but there were no scars or

tumors present. Neither the apex impulse of the heart nor any abnormal pulsations were seen or felt. The heart was not enlarged to percussion. The sounds were of fair quality and there were no murmurs heard. The aorta did not seem to be enlarged. The pulses were equal and regular, the rate being 120 per minute. The arteries were not sclerosed. There were no prominent veins. The blood pressure was 140/100 and was equal in both arms. Tactile fremitus was greatly diminished over the entire left lung, was absent over the left base, and was increased over the entire right lung. There was a dull percussion note over the entire left lung and flatness over the left base. The right lung was slightly hyper-resonant. The breath sounds were almost absent over the left lung, and were compensatorily increased over the right lung. There were a few inconstant rales at the right base. There were no organs palpable in the abdomen and there was nothing to be noted except the scar of the operation just below the umbilicus.

The remainder of the physical examination was essentially negative except for definite clubbing of all the fingers. The reflexes were present, active, and equal, and there was no adenopathy.

Laboratory Findings: The urine was negative on all examinations except for a slight trace of albumin and a few epithelial cells. The Wassermann test was negative on three occasions. The feces were negative. The sputum was scanty and mucoid in type. The microscopic examination showed only a few streptococci and staphylococci. The white blood count varied from 8,800 to 14,900. The red blood count varied from 3,224,000 to 3,960,000. The hemoglobin ranged from 60% to 85%. The differential blood count was normal at three examinations. A stereoscopic examination of the chest made the day after admission to the hospital showed marked density of the left lung, extending from the clavicle to the diaphragm. The density was homogeneous but there was no displacement of the heart or the mediastinal contents. In the right lung there were two areas of density symmetrical in outline and about the size and shape of a half dollar. One was located in the third interspace anteriorly and the other in the sixth interspace and more toward the peri-

phery of the lung. They had the appearance of small tumors. (See Fig. I.)



X-Ray of lungs showing the density in the right lung from the clavicle to the diaphragm. The arrows in the left lung define two thrombotic tumor masses.

The left chest was tapped soon after the patient was seen and 600 cc. of clear, amber colored, serous fluid was removed. The microscopic examination showed only a few pus cells and red blood cells. Some of the fluid was inoculated into a guinea pig but the pig failed to die after six weeks of observation.

X-ray pictures of the chest were made after the chest was tapped but did not differ materially from the stereoscopic examination mentioned above.

Clinical Course: The patient was admitted to the hospital with a temperature of 99°, a pulse of 120 per minute, and respiration of 25 per minute. Two days after admission the temperature rose to 100° in the afternoon, and the respiration rose to 30 per minute. For the next three days the temperature went to 100° in the afternoon but fell to normal every morning. The remaining three weeks of the patient's stay in the hospital the temperature was normal but the pulse hovered at 120 and the respirations at 30.

The patient complained of a constant dull pain in the left chest radiating to the left shoulder. She was very weak and dyspneic

and suffered paroxysms of hard coughing which sometimes caused her to vomit.

After the removal of the serous fluid from the left chest three weeks after admission, the cough, pain, and dyspnea became less severe.

Two days after admission she was placed on mixed treatment and neo-arsphenamine as a therapeutic test but she developed an iodide rash after receiving 1.33 ounces of the mixed treatment and failed to improve, so it was discontinued.

The patient's left chest was tapped again just before she left the hospital and about one week after the first tapping, and 300 cc. of serous fluid was recovered. After being in the hospital one month she was discharged slightly improved. She did very well at home for about three weeks but suddenly became markedly dyspneic and cyanotic and died shortly afterward.

Discussions When a case presents many points which are characteristic of several diseases, one is at a loss to evaluate them in making the diagnosis. In the present case we are confronted with such a problem.

The past history reveals that one year ago she had the uterus removed, following which she developed post-operative pneumonia. We also find that her left chest had been tapped several times and a clear, serous fluid removed.

The present physical examination is negative except for definite clubbing of the fingers and the signs of a large amount of fluid in the left pleura. Clubbing of the fingers may be seen in any long standing disease of the heart, lungs, or pleura, or any long standing abdominal tumor causing an elevation of the diaphragm and a decreased lung capacity. At this point it may be well to take up the diseases which must be considered and ruled out before a presumptive diagnosis may be made.

First, we shall consider syphilis. The history was negative; there was no evidence of syphilis elsewhere in the body; three Wassermann tests were negative; the therapeutic test was negative; and the finding of fluid in the pleura is not consistent with syphilis of the lung.

Tuberculosis is our next consideration. Eighty per cent. of all pleurisy with serous

effusion is tubercular in origin. In the present case the fluid was serous but, when injected into a pig, failed to cause death, and the bacillus was not found microscopically. The sputum was not plentiful as is usually the case in tuberculosis, and no bacilli were found in it. The white blood count averaged 11,000, which is also against the diagnosis of tuberculosis unless there be secondary infection present. However, the physical signs were consistent with a tuberculous pleurisy with a large effusion, and the X-ray evidence, although not typical of tuberculosis, was not strong enough to rule it out absolutely.

Thirdly, let us consider aneurysm. The Wassermann test was negative and the X-ray picture was not consistent with a diagnosis of aneurysm. There were no dilated veins to be seen on the body nor were there any pulsations to be felt. The anemia and the white count were against aneurysm. The blood pressure was the same in both arms and no edema was seen. The patient was not hoarse and had never spit up blood.

Our last consideration will be malignancy of the lung, the most probable diagnosis. Primary malignancy of the lung or pleura is extremely rare. In this case, if we look into the past history, we find that the patient had her uterus removed one year ago because of what was said to be an uncomplicated fibroid. The organ was not examined microscopically after removal; we may, therefore, assume that there was some malignant change in this fibroid. In 4,880 cases of fibroid uterus, Dr. Howard Kelly found malignant change in the cervix in 1.4 per cent. and in the fundus in 2.8 per cent. If there were malignant change in the uterus, it could very easily have metastasized to the lungs. The pain, persistent cough, extreme weakness, and dyspnea are usually seen in cancer of the lung, but there were no palpable glands in the entire body, no emaciation, and no loss of weight. Neither was there any bloody sputum, which is sometimes seen in malignancy of the lung as well as in tuberculosis. Since all types of lung cancer involve the pleura early, a pleural effusion is usually present which accumulates rapidly and completely fills the chest. The effusion may or may not be bloody. The X-ray picture was our strongest evidence of malignancy of the

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

MAY, 1928

ALLEN H. BUNCE, M.D., Editor

H. L. ROWE, Business Manager

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M. M. HEAD, M.D.

Articles are accepted for publication on condition that they are contributed solely to this Journal.

Manuscripts should be typewritten, double-spaced, and the original (not the carbon copy) submitted. Used manuscript is not returned unless requested.

Communications and items of general interest to the profession are invited from all parts of the State. We especially invite county society secretaries to send us information of happenings in the county that would be of interest to the members throughout the State.

Reprints should be ordered within 30 days after the appearance of an article, since all type will be destroyed at the end of that time.

Editorial Department

THE SAVANNAH SESSION

The seventy-ninth annual session of the Association which was held in Savannah from May 9th to 11th was in many respects the most successful in our entire history. Savannah, the oldest and most historic city in our state, entertained as only Savannah knows how to entertain. Elaborate as this was it in no way interfered with the business or scientific meetings. Everything was so planned beforehand that things moved along as well oiled machinery should.

It is impossible in the short space available to give an adequate description of all the important events; but some of the high lights were: the Abner Wellborn Calhoun Lecture by Dr. George E. de Schweinitz of Philadelphia—a masterly address, in the introduction of which he paid a glowing tribute to his friend and former co-worker, the late Abner Wellborn Calhoun; the address of our President, Dr. William A. Mulherin on Thursday;

the address of our guest, Dr. Clifford G. Grulee of Chicago, on Thursday afternoon; the banquet on Thursday night at which Dr. R. L. Miller presented the "Badge of Service" to President Mulherin and Dr. W. R. Daney presented the Crawford W. Long Memorial Medal to Dr. M. Hines Roberts, and the charming playlette, "The Helping Hand," written by Mrs. T. P. Waring was presented by her associates followed by a beautiful dance to real Southern music.

The report of the Secretary-Treasurer showed that the American Medical Association gave us credit for 1771 members on April first. This is especially important this year since at the Minneapolis meeting the triennial reapportionment of delegates to the A. M. A. will take place and this good showing will undoubtedly enable Georgia to retain three delegates as at the present time.

The election on Friday at noon was the closest we have ever witnessed but it was notably free from personalities. Perfect order was maintained and it was conducted by President Mulherin in a dignified and parliamentary manner. The following officers were elected by a majority vote of those present:

President: Dr. C. K. Sharp, Arlington.

President-Elect: Dr. W. R. Daney, Savannah.

First Vice-President: Dr. W. E. McCurry, Hartwell.

Second Vice-President: Dr. M. Hines Roberts, Atlanta.

Parliamentarian: Dr. M. A. Clark, Macon.

Delegates to the A. M. A.:

Dr. W. H. Myers, Savannah.

Dr. E. C. Thrash, Atlanta.

Alternates:

Dr. W. A. Mulherin, Augusta.

Dr. C. W. Roberts, Atlanta.

Councilors:

Fifth District:

Dr. E. C. Thrash, Atlanta.

Sixth District:

Dr. M. M. Head, Zebulon.

Eighth District:

Dr. H. M. Fullilove, Athens.

The next annual session will be held in Macon during the second week in May of 1929.

MESSAGE FROM OUR PRESIDENT

To the Members of the Medical Association of Georgia:

I want to take this method of expressing to you my heartfelt thanks for the highest honor you can bestow upon a fellow member; that of making me your president for the year 1928-29. I feel very keenly my unworthiness of this honor, but, as you have seen fit to place it upon me, I shall strive to measure up to its requirements.

All that I am and have is due to the inspiration derived during my past twenty-eight years membership in the Medical Association of Georgia—the latter half of this period as Councilor. If there is a regret as a result of my preferment it is the fact that my new position deprives me of that delightful fellowship incident to my services as Councilor. Next to the Secretary, the Councilor is the greatest factor for good in the Association; he is in intimate contact with medical affairs in his district, and his opportunities for advancing the cause of decent medicine is unlimited; it is a place for service that counts for something. He should be a four-square man and willing to sacrifice a little of his time and is not opposed to work.

Let us individually and collectively go forward with up-lifted faces and strive for that perfect day in medicine when all physicians will indeed be brothers, and when, "The search for truth will be the impelling force," and thus have restored unto us that lofty respect our forefathers enjoyed. We can never hope for that happiness that should be ours if we allow envy, discord and contention to dominate our lives.

I am looking forward with much pleasure to my visits to the various district societies throughout the state and hope to meet and greet each of you during the year.

C. K. SHARP, M.D.

Arlington, Ga., May 14, 1928.

INTERSTATE POST-GRADUATE MEDICAL ASSOCIATION WILL MEET IN ATLANTA, OCTOBER 12th TO 19th, INCLUSIVE. MAKE YOUR ARRANGEMENTS TO ATTEND.

AMERICAN MEDICAL ASSOCIATION
OFFICIAL CALL

To the Officers, Fellows and Members of the American Medical Association:

The seventy-ninth annual session of the American Medical Association will be held in Minneapolis, Minnesota, from Monday, June the eleventh, to Friday, June the fifteenth, Nineteen hundred and twenty-eight.

The House of Delegates will convene on Monday, June the eleventh.

The Scientific Assembly of the Association will open with the General Meeting held on Tuesday, June the twelfth, at 8:30 P.M.

The various sections of the Scientific Assembly will meet Wednesday, June the thirteenth, at 9 A.M. and 2 P.M. and subsequently according to their respective programs.

JABEZ NORTH JACKSON,
President.

FREDERICK C. WARNSHUIS,
Speaker, House of Delegates.

Attest:

OLIN WEST, *Secretary*

Chicago, Ill., March the twentieth.

SCIENTIFIC ASSEMBLY

The General Meeting, which constitutes the opening exercises of the Scientific Assembly of the Association, will be held Tuesday evening, June 12, 1928, at 8:30. The Sections will meet on Wednesday, Thursday and Friday, June 13, 14 and 15, 1928.

Convening at 9:00 A.M. the Sections on—
Surgery, General and Abdominal.

Ophthalmology.

Diseases of Children.

Pharmacology and Therapeutics.

Nervous and Mental Diseases.

Dermatology and Syphilology.

Gastro-Enterology and Proctology.

Radiology.

Convening at 2:00 P.M. the Sections on—
Practice of Medicine.

Obstetrics, Gynecology and Abdominal Surgery.

Laryngology, Otology and Rhinology.

Pathology and Physiology.

Urology.

Orthopedic Surgery.

Preventive and Industrial Medicine and Public Health.

INTERSTATE POST-GRADUATE ASSOCIATION WILL MEET IN ATLANTA

For the first time in the South there will be held a medical association whose procedure is unique and of remarkable interest.

The Interstate Post-Graduate Medical Association of North America will meet in Atlanta, Ga., October 12th to 19th, inclusive. This association in 1926 met in Cleveland, Ohio, where nearly 5,000 practicing physicians were registered. At the Kansas City meeting last October 5,200 were registered.

Those who come to this remarkable sort of medical meeting will really be given a post-graduate course by the leading medical men of this country and abroad. The daily meetings are held from 7 A.M. to 1 P.M., from 2 to 5 P.M. and from 8 to 10 P.M. Every one who has attended these meetings has been amazed by the magnitude of the work done, by its quality, by the number of distinguished guest and by the remarkable interest aroused.

It is hoped that every physician in the Southern States who can possibly do so will plan now to attend this meeting. The only charge imposed on physicians who are in good standing in their county, state and national organization is a registration fee of \$5.00.

THE ACIDITY OF THE GASTRIC CONTENTS IN PULMONARY TUBERCULOSIS

Tuberculosis next to syphilis is the most protean of all diseases. Vague symptoms of indigestion and disordered gastric function have long been recognized among the presenting symptoms of the disease. Many times the doctor is confronted with patients complaining of indigestion and the attention is focused on the gastro-intestinal tract with never a thought of the lungs. These cases should always suggest the possibility of pulmonary tuberculosis and warrant a careful examination of the chest. It is as essential to take stereoscopic films of the chest in these cases as it is to do a gastro-intestinal study. Dr. David Perla* has reported studies on the gastric function of 198 cases of pulmonary tuberculosis. Analysis of the stomach contents was done one hour after a meal of one slice of

toast and 500 cc. of water. The results were the same for both of the sexes. A standard of from 40 to 60 degrees for the total acidity was taken as the normal. A free hydrochloric acid content of from 11 to 20 degrees was considered a moderate hypo-acidity and below 11 it was considered a marked hypo-acidity. Diminished secretion of hydrochloric acid was demonstrated in 75 per cent of the cases, of this number 10 per cent had no free hydrochloric acid present, 27 per cent had a marked hypo-acidity and 37 per cent had a moderate hypo-acidity. Anemia was ruled out as a factor in diminished hydrochloric acid secretion by repeated blood counts.

The prominent symptoms associated with hypo-acidity were distention, constipation, anorexia and a sense of fullness in the epigastrium following meals. Heartburn and sour eructations were very frequent symptoms. Dr. Perla concludes that heartburn and sour eructations are more frequently associated with hypo-acidity than with hyper-acidity. All cases of emetic cough showed definite hypochlorhydria. Marked hypochlorhydria was found to be more frequent in cases presenting constitutional symptoms than in those free from them.

The significance of these observations is of clinical importance to the practicing physician. He is constantly confronted with troublesome symptoms of indigestion in tuberculous patients. In many cases prompt relief of these distressing symptoms is afforded by the liberal use of dilute hydrochloric acid.

*Perla D. Studies on gastric function in pulmonary tuberculosis, analysis of the gastric function in 198 cases.—*The American Review of Tuberculosis*, April, 1926, 13,317.

THYROID GLAND IN INFECTIONS

All the data presented by W. H. Cole and N. A. Womack, St. Louis (*Journal A. M. A.*, April 21, 1928), point strongly to the fact that the thyroid gland takes an active part in the mechanisms combating diseases of the body in general. Especially does this seem true in acute infections and fevers. Since the iodine content of the gland is reduced so markedly during acute infectious processes experimentally, it seems logical to assume, that the administration of iodine to patients with infectious processes, especially of the acute type, might be beneficial.

District and County Societies

DISTRICT OFFICERS

FIRST DISTRICT

President.....Lanier, L. F., Rocky Ford
1st Vice-Pres.....Myers, Wm. H., Savannah
2nd Vice-Pres.....Elarbee, G. W., Daisy
Sec'y-Treas.....Long, W. V., Savannah

SECOND DISTRICT

President.....Chason, Thomas, Donalsonville
Sec'y-Treas.....Watt, Chas. H., Thomasville

THIRD DISTRICT

President....Stukes, J. T., Americus
Vice-Pres.....Daves, V. C. Vienna
Sec'y-Treas.....Greer, Chas. A., Oglethorpe

FOURTH DISTRICT

President.....Clark, W. H. LaGrange
Sec'y-Treas.....Callaway, Enoch, LaGrange

FIFTH DISTRICT

President.....Ansley, W. S., Decatur
Vice-Pres.....Barber, W. E., Atlanta
Sec'y-Treas.....Camp, R. T., Fairburn

SIXTH DISTRICT

President.....Miles, W. C., Griffin
Vice-Pres.....Miller, G. T., Macon
Sec'y-Treas.....Thompson, O. R., Macon

SEVENTH DISTRICT

President.....Harbin, R. M., Rome
Vice-Pres.....Wood, C. V., Cedartown
Sec'y-Treas.....McCord, M. M., Rome

EIGHTH DISTRICT

President.....Johnson, J. E., Elberton
Vice-Pres.....Reynolds, H. I., Athens
Sec'y-Treas.....Carter, D. M., Madison

NINTH DISTRICT

President.....Coker, Grady N., Canton
Vice-Pres.....Neal, L. G., Cleveland
Sec'y-Treas.....Bennett, J. C., Jefferson

TENTH DISTRICT

President.....Cranston, W. J., Augusta
Vice-Pres.....Revell, S. T. R., Louisville
Sec'y-Treas.....Phinizy, Irvine, Augusta

ELEVENTH DISTRICT

President....McMichael, J. R., Quitman
Vice-Pres.....Fleming, Albert, Folkston
Sec'y-Treas.....Reavis, W. F., Waycross

TWELFTH DISTRICT

President.....New, J. E., Dexter
Vice-Pres.....Edmondson, J. W., Dublin
Sec'y-Treas.....Cheek, O. H., Dublin

1928 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 20, 1927.

2. Turner County, Dr. J. H. Baxter, Ashburn, November 15, 1927.

3. Terrell County, Dr. Logan Thomas, Dawson, December 1, 1927.

4. Pike County, Dr. M. M. Head, Zebulon, December 3, 1927.

5. Ben Hill County, Dr. L. S. Osborne, Fitzgerald, December 8, 1927.

6. Evans County, Dr. S. T. Ellis, Claxton, December 29, 1927.

7. Taylor County, Dr. J. C. Hind, Reynolds, January 3, 1928.

8. Jasper County, Dr. E. M. Lancaster, Shady Dale, January 6, 1928.

9. Talbot County, Dr. C. C. Carson, Talbotton, January 28, 1928.

10. Wayne County, Dr. M. N. Stow, Jesup, February 9, 1928.

11. Lamar County, Dr. Jno. M. Anderson, Barnesville, March 6, 1928.

12. Terrell County, Dr. Logan Thomas, Dawson, March 7, 1928.

13. Stephens County, Dr. C. L. Ayers, Toccoa, March 8, 1928.

14. Crisp County, Dr. J. N. Dorminy, Cordele, April 5, 1928.

15. Henry County, Dr. H. C. Ellis, McDonough, April 10, 1928.

NEW MEMBERS FOR 1928

Baggs, D. W., Ludowici.
Bartee, L. H., West Point.
Battey, Golden R., Augusta.
Beall, C. R. F., Atlanta.
Bickerstaff, J. Warren, Atlanta.
Bridges, E. C., Donalsonville.
Carmichael, W. W., Hampton.
Crozier, G. T., Valdosta.
Deal, D. L., Stilson.
Elliot, J. L., Savannah.
Epting, M. J., Savannah.
Gibson, B. Harrison, Allenhurst.
Giddens, C. C., Brixton.
Hancock, C. R., Atlanta.
Lewis, W. H., Siloam.
Lyon, G. T., Atlanta.
Massenburg, Geo. Y., Macon.
McDuffie, H. F., Atlanta.
McClung, R. H., Atlanta.
Moye, O. B., Soperton.
Owens, B. G., Valdosta.

Pirkle, C. I., Atlanta.
 Pirkle, J. A., Monroe.
 Saunders, A. F., Valdosta.
 Smith, E. C., Donalsonville.
 Stapler, M. M., Macon.
 Stewart, J. C., Atlanta.
 Talbot, T. M., Valdosta.
 Ward, J. B., Macon.

ELEVENTH DISTRICT MEDICAL SOCIETY MEETING

Semi-annual meeting Eleventh District Medical Society, Brunswick, Georgia, Tuesday, April 10, 1928, 10 o'clock A.M.

Meeting called to order, J. R. McMichael, M.D., President, Quitman, Ga.

Invocation, Rev. W. K. Blevins, Pastor First Methodist Church, Brunswick, Ga.

Address of Welcome, Hon. John T. Whittle, Mayor, Brunswick, Ga.

Response to Address of Welcome, B. H. Minchew, Waycross, Ga.

SCIENTIFIC PROGRAM

Case Report of an Extensive Burn of Trunk, C. C. Fishburne, Brunswick, Ga.

Discussion, K. McCullough, J. A. Dunwody, R. L. Johnson, Charles Usher.

Some Bedside Notes, John W. Daniel, Savannah, Ga.

Discussion, K. McCullough, Charles Usher, W. C. Hafford, O. O. Watson, J. W. Daniel. The Oral Hygiene Program of State Board of Health, A. A. Lawry, D.D.S., Valdosta, Ga.

Discussion, Drs. Stow, Toepel, Minchew, Daniel, Akridge, Greer, McCullough, McClure, McMichael, Ritch.

Premature Separation of Placenta, C. M. Stephens, Waycross, Ga.

Discussion, R. L. Johnson.

Symposium on Gonorrhea—

(a) Acute Gonorrhea, W. C. Hafford, Waycross, Ga.

(b) Gonorrheal Ophthalmia, W. D. Mixson, Waycross, Ga.

(c) Gonorrheal Arthritis, Theodore Toepel, Atlanta, Ga.

Discussion, Quarterman, Schearouse, Reavis, Toepel and Hafford.

Luncheon at Y. W. C. A., which was followed by a motor trip to St. Simons and Glynn Isle.

Eight O'clock P. M., Emory Glee Club, guests of Glynn County Medical Society.

Valdosta was selected for next meeting place.

W. F. REAVIS, M.D., *Secretary*.
 Waycross.

COUNTIES REPORTING FOR 1928

TATTNALL COUNTY MEDICAL SOCIETY

Tattnall County Medical Society announces the following officers for 1928:

President—Jno. M. Bowen, Cobbtown.

Secretary-Treasurer: J. C. Collins, Collins.

COBB COUNTY MEDICAL SOCIETY

Cobb County Medical Society announces the following officers for 1928:

President—L. G. Garrett, Austell.

Vice-President—W. E. Benson, Marietta.

Secretary-Treasurer: Wm. Mayes Gober, Marietta.

BULLOCH-CANDLER COUNTIES MEDICAL SOCIETY

Bulloch-Candler Counties Medical Society announces the following officers for 1928:

President—H. H. Olliff, Register.

Vice-President—B. A. Deal, Statesboro.

Secretary-Treasurer—Waldo E. Floyd, Statesboro.

Delegate—B. A. Deal, Statesboro.

Censors—R. L. Cone, W. D. Kennedy and A. J. Bowen.

MADISON COUNTY MEDICAL SOCIETY

Madison County Medical Society announces the following officers for 1928:

President—G. L. Loden, Colbert.

Vice-President—R. J. Westbrook, Ila.

Secretary-Treasurer—W. D. Gholston, Danielsville.

Delegate—G. L. Loden, Colbert.

Censors—R. J. Westbrook, G. L. Loden and H. H. Hampton.

BURKE COUNTY MEDICAL SOCIETY

Burke County Medical Society announces the following officers for 1928.

President—W. W. Hillis, Sardis.

Vice-President—J. B. Lewis, Waynesboro.

Secretary-Treasurer—R. L. Miller, Waynesboro.

Delegate—J. M. Byne, Waynesboro

Censors—J. M. Byne, J. M. Cook and J. B. Lewis.

LOWNDES COUNTY MEDICAL SOCIETY

Lowndes County Medical Society announces the following officers for 1928:

President—S. B. Ellis, Valdosta.

Vice-President—B. G. Owens, Valdosta.

Secretary-Treasurer—D. L. Burns, Valdosta.

CRISP COUNTY MEDICAL SOCIETY

Crisp County Medical Society announces the following officers for 1928:

President—M. R. Smith, Cordele.

Vice-President—L. E. Williams, Cordele.

Secretary-Treasurer—J. N. Dorminy, Cordele.

Delegate—W. A. Miller, Arabi.

Censors—V. O. Harvard, W. A. Miller and H. J. Williams.

Georgia State Nurses' Association

OFFICERS

| | | | |
|-------------------------|----------------------------------|-------------------------|---------------------------------|
| President..... | Miss Annie Bess Feebeck, R.N. | | |
| | Grady Memorial Hospital, Atlanta | | |
| 1st Vice-President..... | Miss E. Alma Brown, R.N. | 2nd Vice-President..... | Miss Jessie Veazey, R.N. |
| | University Hospital, Augusta | | St. Andrews Apt., Atlanta |
| Secretary..... | Mrs. Alma E. Albrecht, R.N. | Treasurer..... | Miss Jane Van De Vrede, R.N. |
| | Georgia Infirmary, Savannah | | 105 Forrest Ave., N.E., Atlanta |

THREE NATIONAL NURSING ORGANIZATIONS WILL CONVENE IN LOUISVILLE, JUNE 4-9

Four joint sessions of the three National Nursing Organizations have been planned for the Biennial Convention in Louisville, Ky., June 4-9, promising meetings of unusual interest and merit.

The economics of nursing will be made known by presentation by Dr. May Ayres Burgess of the results of the survey being conducted by the Grading Committee; private duty service and nurse distribution will be vital themes treated, and the program will include, among many splendid things, noted speakers on health work, health education and similar subjects.

Presidents' night will open the convention officially the evening of June 4th, and addresses of welcome will be made by the Governor of Kentucky and the Mayor of Louisville. Miss S. Lillian Clayton, president of the American Nurses' Association, will respond for the nurses. Brief talks will be made by Miss Clayton, Miss Carrie M. Hall, president of the National League of Nursing Education, Mrs. Anne L. Hansen, president of the National Organization of Public Health Nursing, and by Miss Clara D. Noyes, director of nursing service of the American Red Cross.

Dr. Charles Hubbard Judd of the University of Chicago, will be the principal speaker at this time, his subject being "Adult Education."

Such is the announcement made through the monthly bulletin of the A. N. A.

Dr. May Ayres Burgess, Director of the Committee on the Grading of Nursing Schools,

will make public for the first time the final results of the 18 months' nation-wide study of the economics of nursing, presenting graphically by means of charts the results of this study up to this point—the end of the second year of the proposed five years' survey. The results of this survey are said to be surprising, therefore, of interest to every nurse in the country.

Session of Tuesday Morning, June 5th

Dr. C. A. Winslow, professor of public health, Yale University School of Medicine, will discuss "Community Nursing Needs" on Tuesday morning, June 5th.

Miss Effie J. Taylor of Yale, and chairman of the Mental Hygiene Section of the A. N. A., will be in charge of Wednesday morning's program.

Lantern slide pictures of all government services will be shown at the meeting of the Government Section of the A. N. A., Wednesday afternoon, and reports will be given of the Army, Navy, Public Health Service, Veterans' Bureau and Indian Service at that time. An address by a student of the Army School of Nursing and also by a student of the U. S. Navy School of Pharmacist Mates will be interesting features of this particular program.

Other Meetings

State Board of Nurse Examiners will have opportunity to discuss their common problems during the sessions of the Legislative Section, and State Secretaries will also meet to take up interstate transfers and other matters of interest at a luncheon meeting during the convention.

Miss Jessamine Whitney of the National Tuberculosis Association will speak on "Tuberculosis in the Young Woman" at the meeting of the Relief Fund chairmen, Monday afternoon, June 4th. Problems of administra-

tion, insurance as a need for the nurse, and other subjects will be discussed at this meeting.

N. L. of N. E. and N. O. P. II. N.

The National League of Nursing Education will take up several subjects of wide interest, including "Education of Nurses in Colleges and Universities," "Staff Education," "The Use of Intelligence Ratings in Schools of Nursing," etc., etc.

Under the auspices of the National Organization of Public Health Nursing, sessions in rural, school, tuberculosis and industrial nursing will be held; and the relationships between the community chest and public health organizations, staff education and supervision, will also be taken up.

Special Convention Railroad Rates

Attention is called to the special railroad rates pertaining practically in every section of the country. The certificate plan adopted enables a nurse to make the trip to the convention at one and one-half fare by obtaining a certificate when ticket is purchased. This reduced fare, however, will not apply unless certificate is secured *at the same time ticket is purchased*. Ask your local agent for a certificate when purchasing your ticket, and present this to the railroad representative located in the Louisville Armory during the convention. He will validate the certificate; then return ticket may be purchased at one-half the usual rate. Certificates will be honored up to and including June 12th.

Remember

To make your room reservation early.

To arrive in Louisville by Sunday evening as the N. L. N. E. sessions begin early Monday morning.

To arrange with your local committee regarding transportation.

To obtain a certificate from your transportation agent if you expect to travel on the one-and-one-half-fare rate.

To have certificate validated by railroad representative in Louisville Armory. This is absolutely essential, if low rate is used.

To have all mail addressed care of the Jefferson County Armory, Louisville, Ky.

SEVERAL THOUSAND DELEGATES
EXPECTED

About five thousand nurses attended the last biennial, and it is estimated as many or more will be present in Louisville, June 4th. Every State Association will undoubtedly send a number of official representatives in addition to lay members. At this time there are more than seventy thousand nurses in membership with the A. N. A., an increase of approximately five thousand over last year. The honor of greatest percentage of increase in membership goes to the state of Oregon, which has shown a gain of 64% this year. New York State still comes first with nine thousand seven hundred and sixty-five members; Pennsylvania second with seven thousand four hundred and seventy-three. Georgia is the twenty-third state in point of membership, with a total of 785 members up to March 1st.

OVER THE RADIO!

Through the courtesy of the National Broadcasting Corporation, radio talks were given April 16th and May 4th from the headquarters of the A. N. A., New York City; and Miss Janet M. Geister, headquarters' director spoke again the morning of May 8th at 11:45 o'clock. Community problems in sickness, and other matters of vital import to nurses and laymen alike are treated in these radio messages, given over WJZ and network.

Institute for Nurses

The Illinois League of Nursing Education will conduct the sixth annual Institute in Chicago, during the last two weeks of June, beginning on Monday, June 18th and closing on Friday, June 29th. A very complete and comprehensive program is being planned, so that Nurses in the various fields of nursing will find an abundance of material, which will be of great educational value.

Course A will consist of a series of lectures on the following subjects: Teaching in Schools of Nursing, Psychology, Sociology, and Effective Speaking.

Course B will consist of special lectures and

demonstrations, which will be held at the various hospitals in the city. Experts in their special fields will be selected for this series, so that those attending the Institute will have the great privilege of hearing and meeting some of the most eminent men and women of the medical and nursing profession. This series of lectures will be so arranged, that the Private Duty Nurse, Public Health Nurse, the Administrator and the Instructor will find something of interest in her field of nursing.

A special feature of the Institute will be a course of lectures in Psychology, at a late afternoon hour, by Dr. William E. Blatz, Professor of Psychology, University of Toronto.

The complete program will be ready for distribution May 12, 1928. Those desiring a program or any further information should write to May Kennedy, Director, Institute for Nurses, 6400 Irving Park Boulevard, Chicago, Illinois.

Summer Courses for Nurses at Peabody College

Peabody College, Nashville, has announced its course of instruction for Public Health Nurses and for Instructors and Supervisors. The first term will begin June 12, ending July 20. The second term, July 21 to August 29. Nurses desiring information should address Miss Abbie Roberts, Director of Nursing Education, care the George Peabody College for Teachers, Nashville, Tenn.

G. S. N. A. CONVENTION

The Georgia State Nurses' Association will hold its annual convention in Columbus, November 8-10. Nurses, get ready for the biggest and best convention ever held in this state!

First District Meeting

The First District organization of the G. S. N. A. held the April meeting Friday afternoon the 27th in the Academy of Medicine, Miss Cora Byers, president, presiding.

Miss Jane Van De Vrede, Executive Secretary of the G. S. N. A., was the principal speaker, giving a report of the work of the Committee on the Grading of Nursing Schools, having just returned from New York where she secured late information on the progress

of the survey. Miss Van De Vrede made a plea for the hearty support of the nurses in financing this Grading Plan.

Miss Oliver, a Missionary from China on furlough in this country, contributed a very interesting talk on "Nursing in China," where training schools are registered and must have the seal of the Chinese Board of Examiners.

Miss Kathryn Woodburn was chairman of the program committee.

Among the items of business transacted was the election of Mrs. Sue Paille as a delegate from the First District of the G. S. N. A. to the Biennial Convention.

Fourth District Meeting

The Fourth District held its meeting Wednesday, April 25th, in Telfair Hospital, with seventy-five or more nurses in attendance. Miss Frances White, president, presided, and the program was an interesting one.

Mr. Conrad Kinyon, Director of Laboratories of the Savannah City Health Department, gave a splendid talk on the relation of protective substances, such as serums, vaccines and anti-toxins, to the treatment and prevention of disease.

Miss Jane Van De Vrede, Executive Secretary of the G. S. N. A., was a guest of the organization, and presented very very graphically the progress of the work of the Committee on the Grading of Nursing schools, making a special plea for financial support of the plan on the part of nurses in Georgia. She also discussed the plans of the forthcoming Biennial Convention, especially as related to the program and the larger activities of the three nursing organizations. Hearty response was given.

Miss Annie Jones, Regional Supervisor of the Metropolitan Life Insurance Company's Nursing Service, and Miss Ruth Mettinger, Nursing Field Representative of the American National Red Cross for Georgia and Florida, were also guests of the organization on this occasion.

The Public Health Section of the District held a luncheon meeting at the Forsyth Tea Room Monday, April 23rd. Miss Mettinger and Miss Van De Vrede were guests and made talks. Miss Mettinger explained the services

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Georgia Tuberculosis Association

OFFICERS AND STAFF

| | | | |
|--------------------|---------------------------------|--------------------------------|---------------------------------|
| President..... | E. W. Glidden, M.D., Alto | Treasurer..... | T. K. Glenn, Atlanta |
| 1st Vice-Pres..... | Lee M. Happ, Macon | Managing Director..... | Jas. P. Faulkner, Atlanta |
| 2nd Vice-Pres..... | I. A. White, D.D., Cartersville | Health Education Director..... | Miss Mildred S. Manson, Atlanta |
| Secretary..... | Miss Virginia Gibbs, Marietta | Office Secretary..... | Miss Julia Bone, Atlanta |

4 Capitol Square, S. M. Atlanta, Ga.

ADVISORY MEDICAL COMMITTEE

| | | | |
|------------------------|---------|------------------------------|---------|
| E. C. Thrash, M.D..... | Atlanta | J. H. Bradfield, M.D..... | Atlanta |
| Z. S. Cowan, M.D..... | Atlanta | Allen H. Bunce, M.D..... | Atlanta |
| C. C. Aven, M.D..... | Atlanta | Stewart R. Roberts, M.D..... | Atlanta |

MODES OF INFECTION IN TUBERCULOSIS

In attempting to show how tubercle bacilli enter and lodge in the human body, it is necessary to consider the route of infection in the child as compared to the adult; and also the route of infection by the human type as compared to that taken by the bovine type of tubercle bacillus.

Before considering these specific phases of infection, however, it is well to state that primary infection directly into the blood stream, to the meninges or through the genito-urinary tract can practically be dismissed as occurring rarely, if ever. Primary infection through the skin may and does occur in a limited number of cases, but is unimportant as bearing upon the widespread infection with the tubercle bacillus as occurring in the human race. There remain then as the two important portals for entry the respiratory and the digestive systems.

It is well to remember, in the first place, that the tubercle bacillus, in order to invade and grow in the body, must, in every case, pass through a layer of mucous membrane in either of these systems. The organism is not motile, so it is most probable that it is carried through this layer in the bodies of moving cells—in all probability in leukocytes—and thus it comes to lie in lymph spaces, may enter the lymph stream and may be carried to distant parts of the body, usually, however, lodging in lymph nodes. Usually the bacillus passes through the mucous membrane without leaving any lesion at the point of entrance.

In children an increasing per cent of tuberculosis infection is found, until adult ages are reached when 75% to 90% of individuals are, or have been infected. In other words, the great majority of persons become infected before middle age. However, it is very important to keep clearly in mind the distinction between infection and active disease. And it is likely that most of these infections occur as a result of inhalation of dust containing tubercle bacilli, or of droplets coughed or sneezed by a tuberculous individual or direct contact with the fresh sputum. The child being close to the ground, and playing upon the floor or on the ground, has a good opportunity to pick up the dust of dried sputum. The dust being inhaled may lodge in the tonsils and the primary route may be through these organs, or the dust may be carried down to the alveoli of the lung and through the alveolar walls into the lymphatic system of the lung, or finally, and probably most infrequent, the organism may be swallowed and pass into the body through the wall of the intestinal tract.

As to infection with the bovine type of tubercle bacillus, which occurs principally in children, it can be said that this latter route, through the intestinal canal, is the usual one, and here inhalation plays little or no part, since infection with the bovine tubercle bacillus results usually from the ingestion of milk containing the organisms. In this respect, infection with the bovine bacillus may be contrasted with infection with the human type.

Since most persons have already been infected before they reach adult age, and since it is questionable whether a person who is once infected will acquire a second primary

(Continued on page 232)

Woman's Auxiliary Medical Association of Georgia

OFFICERS

| | |
|--|--|
| President.....Mrs. Paul Holliday, Athens | President-Elect.....Mrs. C. C. Hinton, Macon |
| 1st Vice-Pres.....Mrs. Marion T. Benson, Atlanta | 2d Vice-Pres.....Mrs. Wm. R. Dancy, Savannah |
| 3d Vice-Pres.....Mrs. H. L. Rudolph, Gainesville | Cor. Sec.....Mrs. Guy O. Wheelchel, Athens |
| Rec. Sec.....Mrs. J. A. Selden, Macon | Treasurer.....Mrs. Steward D. Brown, Royston |
| Parliamentarian.....Mrs. James N. Brawner, Atlanta | |
| Delegates to A. M. A. | |
| Mrs. C. W. Roberts.....Atlanta | Mrs. H. M. Fullilove.....Athens |
| Delegates to S. M. A. | |
| Mrs. T. L. Holcombe.....Union Point | Mrs. Frank K. Boland.....Atlanta |
| Alternates | |
| Mrs. Dan Y. Sage.....Atlanta | Mrs. Chas. E. Waits.....Atlanta |

NINTH DISTRICT

GAINESVILLE MEETING

The Ninth District Semi-Annual Meeting of the Woman's Auxiliary of the Medical Association of Georgia met Wednesday, September 21, 1927, at Gainesville, Ga. The meeting held at the Dixie-Hunt Hotel with the Ninth District Manager, Mrs. Ralph Freeman, Hoschton, in the chair and Mrs. Annie Lou Rundolph, Gainesville, Secretary, with 17 members present. The minutes of the previous meeting at Alto were read and adopted. A report of Jackson County meeting was given by President Mrs. J. C. Verner, Commerce. The Hygeia Magazine report from Jackson County was given by Mrs. C. M. McDonald, Jefferson.

The following was the program rendered:

Ninth District Meeting Woman's Auxiliary Medical Association of Georgia.

Dixie-Hunt Hotel, Gainesville, Ga., Wednesday, September 21, 1927, 10 A.M.

Invocation, Mrs. E. M. McDonald, Jefferson.

Address of Welcome from City and County, Mrs. J. H. Downey, Gainesville.

Response from Ninth District Auxiliary, Mrs. O. N. Harden, Cornelia.

How Doctors Wives Can Help Their Husbands in an Organized Way, Dr. Allen H. Bunce, Atlanta.

Annual Physical Examination of Adults (white and colored), Dr. Theo. Toepel, Atlanta.

Message from State Auxiliary, Mrs. Paul L. Holliday, Athens, State President.

The State President gave out copies of the Constitution and By-Laws and suggested pro-

grams for the County Auxiliaries for the year—especially stressed the annual physical examination and getting Georgia in the Birth Registration area. A thorough campaign for the Hygeia Magazine. It was suggested that the auxiliary send resolutions to Mrs. J. K. Burns, Sr., Clarkesville.

Mrs. Annie Lou Rudolph was appointed Chairman of Committee to write resolutions. The meeting adjourned at 12:30 to attend the meeting of the doctors in session, and the elaborate dinner supplied by Gainesville doctors, served in the dining room of the Dixie-Hunt Hotel to the doctors and their wives of the district.

After the afternoon session of the doctors meeting, the local doctors chaperoned the members to Chicapee Mills to see the operation of making bandages.

The State President, Mrs. Holliday, gave greetings from all the State Officers.

MRS. RALPH FREEMAN,

District Manager.

MRS. ANNIE LOU RUDOLPH,

Secretary.

CANTON MEETING

The Ninth District Semi-Annual Meeting of the Woman's Auxiliary to the Medical Association of Georgia met Wednesday, March 21, 1928 at Canton. The meeting was held at the First Baptist Church at 10 A.M. The following program was given:

Music, Miss Bessie Edwards, Canton.

Invocation, Mrs. T. J. Vansant, Woodstock.

Infants and Pre-school Hygiene, Dr. Roger W. Dickson, Atlanta.

Importance of Physical Examination for Children Entering School, Dr. Joseph Yampolsky, Atlanta.

Address of Welcome from City and County,
Mrs. G. C. Brooke, Canton.

Response from Ninth District Auxiliary,
Mrs. L. J. Neal, Cleveland.

Music, Misses Rochelle McClure and Bessie Edwards, Canton.

Message from State Auxiliary President,
Mrs. Paul Holliday, Athens.

How a Hygeia Campaign Was Put Over,
Mrs. Joseph Yampolsky, Atlanta.

Activities of Fulton County Auxiliary,
Mrs. Geo. M. Niles, Atlanta.

Music, Miss Bessie Edwards, Canton.

Facts Concerning the Auxiliary, Mrs.
Ralph Freeman, District Manager, Hoschton.

The meeting adjourned at 12:30 and the members of the Auxiliary joined the doctors at dinner, supplied by Canton physicians and served in the dining room of the magnificent church.

After dinner the local doctors chaperoned

the members to the Georgia Marble Quarries at Tate.

MRS. RALPH FREEMAN,
District Manager.

MRS. N. J. COKER,
Secretary.

BALDWIN COUNTY

Woman's Auxiliary to the Baldwin County Medical Society was organized April 4th at the home of Mrs. H. D. Allen, Milledgeville. Mrs. Paul Holliday, Athens, State President, was present and assisted in the organization. The following officers were elected: Mrs. H. D. Allen, Sr., Milledgeville, President; Mrs. Richard Binion, Milledgeville, First Vice-President; Mrs. J. I. Garrard, Milledgeville, Second Vice-President; Mrs. E. W. Allen, Milledgeville, Third Vice-President; Mrs. Jno. W. Mobley, Milledgeville, Corresponding Secretary, and Mrs. Y. H. Yarborough, Milledgeville, Recording Secretary.

BOOK REVIEWS AND ABSTRACTS

Mark S. Dougherty, M. D.
Department Editor

BOOK REVIEWS

Blood Pressure, Its Clinical Applications by George William Norris, A. B., M. D., Professor of Clinical Medicine in the University of Pennsylvania, Henry Cuthbert Bazett, M. B., B. Ch. (Oxon.), F. R. C. S. (Eng.), Professor of Physiology in the University of Pennsylvania, and Thomas M. McMillan, A. B., M. D., Assistant Professor of Cardiology in the Graduate School of Medicine of the University of Pennsylvania. Fourth Edition; pages 387, illustrations 47, colored plate I. Lea and Febiger, Philadelphia. 1927.

This book occupies a distinct place in medical literature. As stated by the authors its purpose is the collection and evaluation in so far as may be possible of the literature that is constantly appearing on this interesting subject. The first few chapters deal with physiological considerations of blood pressure and are entirely new. These chapters represent a concise and practical review of this phase of the subject. The book is well arranged and excellently written. A complete bibliography is given which enhances the value of the book a great deal.

M. S. D.

Auricular Fibrillation, by J. G. Emanuel, Lecturer in Clinical Medicine, University of Birmingham. Published by Cornish Bros. Ltd., Birmingham. 16 fig. 1926.

This little monograph of 31 pages contains the Ingleby Lectures delivered at the University of Birmingham in May, 1925. There are two lectures; in the first of these are given: A general historical discussion of auricular fibrillation; its relation to cardiac exhaustion; the difference between acceleration of the heart in sinus rhythm and auricular fibrillation; a discussion of the character of the impulses passing through the bundle of His; the instability of the pulse in auricular fibrillation; a comparison of the effect of slight damage to the A-V bundle in sinus rhythm and auricular fibrillation; a comparison of the effects of digitalis in the same conditions; the effects of toxins, and the etiology. In the second lecture are discussed: the diagnosis; prognosis; transient and permanent auricular fibrillation, and treatment. Garrey's and Mines' view that fibrillation is due to a circus movement of an impulse starting from an abnormal focus, a longer conduction time and shorter refractory periods of the muscle, is but casually mentioned in connection with the mode of action of quinidine sulphate. The demonstration of the correctness of this view through a determination of the rotation of the electrical axis is not mentioned. The author holds the curious

belief that the reason all impulses arising in the pacemaker in sinus rhythm pass through the A-V bundle, while in auricular fibrillation only a fraction of these go through, is because in the latter condition the impulses are abnormal. He states further that they are abnormal because they originate in auricular fibers. Needless to say, these views are wholly at variance with our present knowledge of cardiac function. The important work of American investigators on the relation of the vagus and the dynamics of the heart in auricular fibrillation is not mentioned. The name of Winterberg is consistently misspelled.

The author has made a personal study of 171 cases of auricular fibrillation. This study forms the basis for the most interesting part of the monograph, namely: those dealing with the etiology, the diagnosis, and the treatment of the condition. He calls particular attention to the role played by toxemias and gives an interesting review of the immediate exciting causes for the condition. In about one half of his cases the onset of the fibrillation was associated with some muscular effort. But these incidents were not unusual in the life of the individuals and the author was forced to the conclusion that it is not possible to assign a definite exciting cause for the onset of auricular fibrillation. He discusses the disabling influence of this condition and calls attention to a group of cases in which vomiting dominates the clinical picture, and may persist as long as the fibrillation lasts. He ascribes this phenomenon to a reflex stimulation of the vomiting center caused by the disordered action of the heart. He calls attention to the complete disappearance of anginal attacks when auricular fibrillation occurs in angina pectoris. The discussion of the treatment is with particular reference to the action of digitalis and of quinidine sulphate and of the manner of administering these drugs. The author prefers to use Nativelle's digitalin granules, gr. 1/240 for which he claims a more effective slowing of the heart than can be obtained with 30 minims of the tincture of digitalis. He gives definite rules on which a choice of patients should be based to render the administration of quinidine sulphate safe. These rules are based on the state of efficiency of the patient's circulation while resting in bed, free of the influence of drugs. There must be no orthopnea, oedema, albuminuria, or enlargement of the liver. He gives exact details of administration and calls attention to the necessity of controlling the response of the heart to treatment by means of the electrocardiograph. The monograph can be recommended to physicians who are chiefly interested in a practical knowledge of a condition which is responsible in a large measure for cardiac failure.

George Bachmann, M. D.

BOOKS RECEIVED

Pathological Physiology of Internal Medicine, Functioning Pathology, by Albion Walter Hewlett, M. D., B. S., formerly Professor of Medicine, Stanford Medical College, Professor of Internal Medicine and Director of Clinical Laboratory, University of Michigan. Revised in Memoriam by his colleagues: Thomas Addis, M. B., Ch. B., M. D.; George DeForest Barnett, A. B., A. M., M. D.; Walter Whitney Boardman, M. D.; Ernest Charles Dickson, A. B., M. B., M. D., et al. Under the Editorial Supervision of George DeForest Barnett. With One Hundred and Sixty Four Illustrations in Text. Contains 787 pages. Publishers: A. Appleton and Company, 35 West 32nd Street, New York City.

Nutrition and Diet In Health and Disease by James S. McLester, M. D., Professor of Medicine in the University of Alabama, Birmingham, Alabama. This book has been written from the view point of the physician whose interests are general. It is hoped that it will be useful to both the student and the practitioner. Two chief factors should govern all dietary regulation: first, the person's nutritive needs; second, the combined experience of the past. Contains 783 pages. Publishers: W. B. Saunders Company, West Washington Square, Philadelphia.

The Uses of Symptoms in the Diagnosis of Diseases by Hobart Amory Hare, B.Sc., M.D., Professor of Therapeutics and Diagnosis in the Jefferson Medical College of Philadelphia; Physician to the Jefferson Medical College Hospital; one-time clinical professor of diseases of children in the University of Pennsylvania; one-time commander U. S. N. R. F.; author of a text book of practical therapeutics and a text book of the practice of medicine. Ninth Edition, thoroughly revised. Illustrated with 124 engravings and 4 plates. Contains 528 pages. Publishers: Lea & Febiger, 600 South Washington Square, Philadelphia, Pa.

NEWS ITEMS

Dr. N. J. Guthrie, formerly of Norcross, has opened offices in the Medical Arts Building, Atlanta.

The Sixth District Medical Society will hold its summer meeting at Indian Springs, Wednesday, July 11. A very interesting scientific program is being arranged.

Sumter County Board of Health has employed a full time health nurse to assist Dr. W. H. Houston, Americus, County Commissioner of Health.

Dr. J. E. Penland, Waycross, has been appointed Captain Surgeon for the Woodmen of the World.

The Tenth District Medical Society convened at Louisville, March 22. Dr. W. W. Battey, Augusta, read a paper on Rupture of Gravid Uterus

at Eighth Month Gestation Through Scar of Prior Caesarian Section; Dr. Louis H. Wright, Augusta, paper on Post Partum Care; Dr. R. L. Harris, Augusta, paper on Treatment of Paresis; Dr. F. X. Mulherin, Augusta, paper on Ileo Colitis; Dr. Stewart R. Roberts, Atlanta, paper on Management of Heart Failure; Dr. V. P. Sydenstricker, Augusta, paper on Digitalis Therapy; Dr. W. R. Houston, Augusta, paper on Nervous Hypertension; Dr. S. T. R. Revell, Louisville, paper on Aortic Stenosis. Next meeting of the society will be held at Warrenton.

Dr. S. P. Goodhart, professor of clinical neurology, Columbia University College of Physicians and Surgeons, New York City, delivered a lecture before the Bibb County Medical Society at the Macon Hospital on March 20.

Drs. T. I. Hawkins and Webb Conn, Griffin, were hosts to the members of the Spalding County Medical Society and the Woman's Auxiliary at a beautiful dinner party on March 20.

The American Child Health Association began a study of Augusta's work in promoting and protecting the health of the school children on March 26. Augusta was one of seventy cities of the country selected for the study. The object being to find the best methods of safe-guarding the health of school children.

Dr. W. P. Jordan, Columbus, was elected chairman of the health clinic staff of the city. Clinics are held regularly each week at the Clinic Building. Practically all the physicians of Columbus are on the staff and hold clinics weekly at a specified time.

The Medical Societies of Brooks, Chatham, Cherokee, Pike, Taylor and Telfair Counties have adopted resolutions endorsing the movement on the part of the Masons of Georgia to build an institute at Alto for the care of tuberculous children.

The United States Public Health Service has made an extensive study of tonsillitis. Some of their conclusions are briefly stated as follows; Tonsillitis is more common in children of school age than before or after; tonsillitis and related conditions appear to be commoner in females than in males; the prevalence of defective tonsils does not seem to be significantly greater in rural than in urban districts; attacks of sore throat are twice as common in children with diseased tonsils as in those whose tonsils have been removed; children with diseased tonsils are particularly liable to lung disease; adults subject to tonsillitis are predisposed to rheumatism.

Dr. J. F. Covington, formerly of Ashburn, has moved to Norcross and opened an office to do general practice and will give particular attention to pediatrics.

The Eleventh District Medical Society met at Brunswick on April 10. The following papers on the Scientific program were read: Case Report of an Extensive Burn of Trunk by C. C. Fishburne, Brunswick; Some Bedside Notes by Jno. W. Daniel, Savannah; State Oral Hygiene Program by A. A. Lawry, D. D. S., Valdosta; Public Health Problems the Physician Can Solve by T. F. Abercrombie, Commissioner of Health; Premature Separation of Placenta by C. M. Stephens, Waycross; Acute Gonorrhea by W. C. Hafford, Waycross; Gonorrheal Ophthalmia by W. D. Mixson, Waycross; Gonorrheal Arthritis by Theodore Toepel, Atlanta.

Dr. B. B. Bagby, Athens, Clarke County Commissioner of Health, conducted a toxin-antitoxin campaign April 5 to 10 and urged all mothers to bring their children. Schools were visited as follows: April 5, Whitehall and Macedonia; April 6, Midway, Winterville, Oak Grove, Tuckston, St. Lukes and Billups Grove; April 9, Centerville, Belmont, Morton's, Chapel, Rural Normal, Lampkin and New Shiloh.

Dr. Wb. J. Burdshaw, Augusta, has accepted an appointment at Wills Hospital, Philadelphia, Pennsylvania.

Dr. H. Lyon Hunt of New York, President of the American Medical Editors' Association, has appointed the Editor of the Georgia Journal, Dr. Allen H. Bunce, a member of the Committee on Legislation of the National Association.

Dr. T. Conrad Williams, formerly of Americus, has moved to Valdosta and opened offices for general practice of medicine.

Announcement has been made that the Maltbie Chemical Company of Newark, New Jersey, has contributed a grant for a research fellowship for the coming year to the Department of Chemistry of Princeton University. The research work to be done under this fellowship will be fundamental in character and will cover certain phases of the chemistry of creosote and creosote compounds. The establishment of this research fellowship is in line with the policy of the Maltbie Chemical Company to extend its research activities and to contribute to a study of the chemistry of important drugs.

For more than 20 years the United States Public Health Service has conducted studies of a very fatal disease which occurs in certain areas in the Western States. This disease is known as Rocky Mountain spotted fever. During the course of the investigations made by the Public Health Service, four workers have lost their lives from the disease, contracted in connection with their official duties. The most recent worker to lose his life from Rocky Mountain Spotted fever is A. Leroy Kerlee, who was employed in the Public Health Service laboratory at Hamilton, Montana, as a

bacteriologist. He was a recent graduate of the Montana State College, and had been in service since September, 1927. Those who had previously lost their lives in this work are Dr. T. B. McClintie, who died in 1921; W. E. Gettinger, a laboratory assistant who died in 1922; and G. H. Cowan, a field assistant, who died in 1924. The warfare of science against disease has its hazards. A. Leroy Kerlee made the supreme sacrifice in the battlefield of the laboratory.

The following Georgians were elected to fellowship in the American College of Physicians at the New Orleans meeting: Doctors E. Bates Block, James E. Paullin, H. C. Sauls, and Joseph Yampolsky, all of Atlanta; and William R. Houston, Augusta.

Dr. J. M. Anderson, Columbus, has closed his office for several months on account of illness and is taking treatment at the United States Veterans' Hospital No. 48, Peachtree Road, Atlanta.

Dr. R. Cullen Goolsby, Jr., formerly of Forsyth, announces the opening of offices in the Georgia Casualty Building, Macon. Practice limited to diseases of children.

The Second District Medical Society met at Bainbridge, April 27. The following scientific papers were read: Enlarged Bronchial Glands by I. M. Lucas, Albany; Acute Appendicitis by W. A. Selman, Atlanta; Mastoiditis by H. M. Moore, Thomasville; Problems in Diagnostics by E. C. Thrash, Atlanta.

The Georgia Health Officers Association met at Savannah, May 8.

Dr. M. F. Smith announces the removal of his office from 107 Beecher Street to 773 Cascade Avenue, S. W. Atlanta.

The Thomas County Medical Society met at the John D. Archibold Memorial Hospital, Thomasville, April 10. Dr. S. E. Sanchez, Barwick; Drs. C. H. Watt and C. K. Wall, Thomasville, were the principal speakers.

Dr. Richard Binion, Milledgeville, will spend about three months at the University of Pennsylvania and the Mayo Clinic, Rochester, Minnesota, studying surgery. He will return about August 1.

Dr. A. J. Waring, Savannah, spoke on Child's Health before the Savannah Kindergarten Club on April 11.

Dr. R. M. Harbin, Rome, attended a class reunion of the Bellevue Hospital Medical College in New York City, April 14. The class holds a reunion every five years.

Dr. J. J. C. Wright, formerly of Tennille, has removed to Doerun and opened offices for the practice of medicine.

The Knox Conway Chapter of the Daughters of the American Revolution have compiled a History of Medicine in Turner County. Biographies of all the physicians who have lived, practiced and died in Turner County are given.

Dr. W. E. Person, Atlanta, was elected president of the Alumni Association of Emory University on April 17, to fill the unexpired term of the late Mr. Thos. W. Connally.

Dr. Geo. E. Atwood, Waycross, health officer for Ware county, held clinics for children of pre-school age at Millwood, April 20-27, and at Waresboro on May 4.

Dr. R. E. McClure, Quitman, health officer for Brooks county, gave the Schick test to school children of Morven on April 12, and Barwick on April 13.

The negro unit of Grady hospital will be enlarged by the purchase of the old Atlanta Dental college property on Butler Street which has been recommended by the city council.

Dr. C. C. Aven announces the removal of his office to the Medical Arts Building, Atlanta.

Dr. L. F. Lanier, formerly of Rocky Ford, has moved to Sylvania.

Western Association of Physical Therapy held its tenth annual meeting at Kansas City, Missouri, April 20-21.

Dr. J. L. Howell announces the removal of his offices from the Atlanta National Bank Building to Medical Arts Building, Atlanta.

OBITUARY

Dr. Wm. Perrin Nicolson, Sr., Member, Atlanta. University of Virginia Department of Medicine, Charlottesville, Virginia, in 1876; aged 71; Died, February 4, 1928, at his home on Piedmont Drive, Atlanta. Dr. Nicolson was the first surgeon south of Washington to perform an operation for appendicitis. He devoted a great deal of his time to charitable work. He came to Atlanta in 1878, was dean of the Southern Medical College, Atlanta for thirty one years, also professor of anatomy and oral surgery of the Southern Dental College, Atlanta. Dr. Nicolson was a member of the Fulton County Medical Society, past president of the Medical Association of Georgia; and a Fellow of the American Medical Association. He is survived by his widow, two sons, Dr. Wm. Perrin Nicolson, Jr., and Lowry Nicolson of Atlanta; one daughter, Miss Carolyn Nicolson, Atlanta. Funeral services were conducted by Bishop H. J. Mikell and Rev. W. W. Memminger and interment in Oakland Cemetery.

Dr. Warren Edgar Benson, Member, Marietta, Atlanta College of Physicians and Surgeons, 1911;

aged 41; died, April 21, 1928, at a private sanitarium, Atlanta, of spinal meningitis. Dr. Benson served as lieutenant during the World War. He was one of the most prominent citizens of his home county and took an active interest in all civic and religious matters. He was a member of the Rotary Club, Masons, Cobb County Medical Society, and the First Baptist church. Surviving him are his widow, mother, one daughter age seven; two sons, one and four years of age respectively. Funeral services were conducted by Rev. J. G. Davis from the First Baptist church and interment in the City cemetery.

Dr. Joaquin B. Arteaga, Atlanta, Emory University School of Medicine, Atlanta, in 1925; aged 28; died April 5, 1928, of spinal meningitis. Dr. Arteaga served as an interne at Grady Hospital for two years and recently began the practice of his profession. He was a zealous worker and a promising young physician. Surviving him are his widow, a year old son, his parents, Mr. and Mrs. J. B. Arteaga, Sr., and five brothers. Funeral services were conducted from Blanchard Brothers Funeral Home and interment in Crest Lawn cemetery.

Dr. Samuel S. Gaulden, Quitman, died at his home February 7, 1928, after an illness of more than two years' duration. He was born in Lowndes County, Georgia, in 1859 and graduated from the University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, in 1886. Dr. Gaulden served for twelve years on the Valdosta board of education; six years as a representative of Lowndes County in the General Assembly of Georgia; served on the board of trustees of the Georgia Baptist Hospital, Atlanta; and at one time president of the State Board of Medical Examiners. He was a leader in civic, political and religious affairs and for many years a prominent physician of his home community. Dr. Gaulden is survived by two sons, William and Albert; one daughter, Mrs. J. C. Weeks, Clinton, North Carolina. Funeral services were conducted from the First Baptist church.

GEORGIA STATE NURSES' ASSOCIATION

(Continued from page 223)

of the A. R. C., and Miss Van De Vrede the work of the National Organization for Public Health Nursing, in relation to its local units. The important issues facing the National Organization were explained and discussed.

The new Director of the Savannah Health Center was also a guest of the luncheon.

EMORY UNIVERSITY ALUMNI MEDICAL CLINICS

JUNE 4-8, 1928

MONDAY, JUNE 4

- 8.00- 9.30 A.M. Registration at old College Building, corner Butler and Armstrong Streets, for transportation to Campus of the University.
- 10.00-11.00 A.M. Reunion of the School of Medicine by classes in the Law Building.

Dr. Goodrich White

12.00- 1.00 P.M. Alumni Luncheon.

WESLEY HOSPITAL

- 1.30- 2.30 P.M. Medical Clinics.
- Drs. Strickler and Reynolds
- 2.30- 3.00 P.M. Clinical Consideration of Goiter.
- Dr. Waites
- 3.00- 3.30 P.M. Methods of Diagnosis.
- Dr. Oppenheimer
- 3.30- 4.00 P.M. Dysenteries in Children.
- Dr. Anderson
- 4.00- 4.30 P.M. Clinical Pathology.
- Dr. Adams
- 2.00- 4.00 P.M. Surgical Clinic. Esophageal Stricture.
- Drs. Boland and Equen
- Surgical Clinic.
- Dr. Grove
- Clinical Ophthalmology.
- Drs. Calhoun and Jackson
- Oto-Laryngology.
- Drs. J. C. McDougall
- Wm. McDougall and Equen

TUESDAY, JUNE 5

GRADY HOSPITAL, WHITE UNIT

- 8.00-10.00 A.M. Surgical Clinics.
- Drs. Donaldson and Clifton
- Ward Walk. Fractures.
- Dr. Goodwin
- Urological Clinic.
- Drs. Earl Floyd, Sinkoe and Reed

EMORY UNIVERSITY DIVISION, GRADY HOSPITAL

- 8.00-10.00 A.M. Surgical Clinics.
- Drs. Selman and McAllister
- Urological Surgery.
- Drs. Boyd and Bailey
- 8.30- 9.00 A.M. The Diarrhoeas.
- Dr. Fitts
- 9.00- 9.30 A.M. Obesity.
- Dr. Paullin
- 9.30-10.00 A.M. Plastic Surgery. Lantern Slides.
- Dr. Highsmith
- 10.00-10.30 A.M. Chronic Nephritis.
- Dr. Sauls
- 10.30-11.00 A.M. Treatment of Rheumatism.
- Dr. Bunce
- 11.00-11.30 A.M. Pyelitis. Differential from other Abdominal Affections.
- Dr. Earl Floyd

- 11.30-12.00 M. Treatment of Nevi.
Dr. Jack Jones
- 12.00-12.30 P.M. Dermatitis Medicamentosa.
Dr. Swanson
- 12.30- 1.00 P.M. The Low Cervical Cæsarian Sec-
tion.
Dr. Bartholomew
- 2.00- 4.00 P.M. Ear, Nose and Throat Clinic. Gray
Clinic.
Drs. J. C. McDougall, Wm. Mc-
Dougall, Equen, Colvin, Warren
and Burgess
Venereal Diseases. (Gray Clinic.)
Drs. B. C. Duncan, Bailey
and Allison
Dermatology. (White Unit.)
Dr. Hailey
- 3.00- 4.00 P.M. Early Syphilis.
Dr. Emery
- 4.00- 5.00 P.M. Immunization.
Dr. Funke

WEDNESDAY, JUNE 6

GRADY HOSPITAL, WHITE UNIT

- 8.00-10.00 A.M. Surgical Clinic.
Dr. T. C. Davison
Orthopedic Clinic.
Dr. Goodwin
Urological Clinic.
Drs. Earl Floyd, Sinkoe
and Reed

GRADY HOSPITAL, EMORY UNIVERSITY DIVISION

- 8.00-10.00 A.M. Gynecological Clinics.
Drs. Denton, J. R. Barfield,
Greene and Walter Holmes
- 8.30- 9.00 A.M. Pneumothorax.
Dr. Aven
- 9.00- 9.30 A.M. Intra-cranial Tumors.
Dr. Dowman
- 9.30- 10.00 A.M. Treatment of Leukoplakia.
Dr. Hailey
- 10.00-10.30 A.M. Abscess of Lung.
Dr. Dan Elkin
- 10.30-11.00 A.M. Injection Treatment Varicose
Veins.
Dr. Rushin
- 11.00-11.30 A.M. Chronic vs. Acute Abdomen.
Diagnosis. Illustrations.
Dr. C. W. Roberts
- 11.30-12.00 M. Early Diagnosis of Tuberculosis.
Dr. Cowan
- 12.00-12.30 P.M. Differential Diagnosis of Acute
Appendicitis.
Dr. Bush
- 12.30-1.00 P.M. Endocrine Diagnosis in Sexual
Disorders.
Dr. Fancher

- 2.00- 4.00 P.M. Pediatric Clinic. (Gray Clinic.)
Drs. Hines Roberts, Yampolsky
and Dickson
- 2.00- 3.00 P.M. Syphilis.
Dr. Duncan
- 3.00- 4.00 P.M. Powdered Milk Formulæ in Feed-
ing Infants.
Dr. Funkhouser
- 4.00- 5.00 P.M. Tertiary Syphilis.
Dr. Sinkoe

THURSDAY, JUNE 7

GRADY HOSPITAL, WHITE UNIT

- 8.00-10.00 A.M. Gynecological Clinics.
Drs. Sage and Barber
- EMORY UNIVERSITY DIVISION, GRADY HOSPITAL
- 8.00-10.00 A.M. Surgical Clinics.
Drs. Pruitt and Rushin
Orthopedic Clinic.
Drs. Hodgson and Smith
- 8.30- 9.00 A.M. Colitis.
Dr. Hal Davison

- 9.00- 9.30 A.M. Surgery of Pulmonary
Tuberculosis.
Dr. Boland
- 9.30-10.00 A.M. Diagnostic Factors of Headaches.
Dr. Hugh Wood
- 10.00-10.30 A.M. Puerperal Eclampsia.
Dr. Benson
- 10.30-11.00 A.M. Radiation in Malignant Disease.
Dr. J. J. Clark
- 11.00-11.30 A.M. Pyloric Stenosis Congenital.
Lantern Slides.
Dr. Landham
- 11.30-12.00 A.M. Physical Measures in Treatment of
Medical and Surgical Cases.
Dr. Toepel
- 12.00-12.30 P.M. Tuberculosis in Children.
Dr. Dimmock
- 12.30- 1.00 P.M. Nerve Injuries.
Dr. Weaver
- 2.00- 4.00 P.M. Ophthalmologic Clinic. (Gray
Clinic.)
Drs. Calhoun, Stockard, Clay,
Crawford and Jackson
Venereal Disease.
Drs. Bailey and Allison
- 3.00- 4.00 P.M. Nausea and Vomiting of
Pregnancy.
Dr. Upshaw
- 4.00- 5.00 P.M. The Convalescent Typhoid
Carrier.
Mr. Sellers
- FULTON CO. MED., 38 PRESCOTT ST.
- 8.00 P.M. Symposium on Organic Heart
Disease.
Etiology.
Dr. Thrash
The Cardiac Arrhythmias.
Dr. Folsom

General Diagnosis.

Dr. Shanks

Treatment.

Dr. Stewart Roberts

FRIDAY, JUNE 8

GRADY HOSPITAL, WHITE UNIT

8.00-10.00 A.M. Surgical Clinic.

Dr. J. T. Floyd

Urological Clinic.

Drs. Earl Floyd, Sinkoe
and Reed

EMORY UNIVERSITY DIVISION, GRADY HOSPITAL

Surgical Clinics.

Drs. J. W. Roberts
and Floyd McRae

8.30-9.00 A.M. Malnutrition in Children.

Dr. Yampolsky

9.00-9.30 A.M. Hernia.

Dr. Dunn

9.30-10.00 A.M. Sterility in Women.

Dr. Greene

10.00-11.30 A.M. Gastro-intestinal Symptoms in
Heart Disease.

Dr. Leadingham

11.30-12.00 M. Early Diagnosis in Ear and
Throat Conditions.

Dr. H. C. Crawford

12.00-12.30 P.M. Appendicitis.

Dr. McArthur

12.30-1.00 P.M. Sinus Infections as a Causative
Factor in Affections of Childhood.
Lantern Slides.Drs. Leon Brawner and Hoppe
Clinic.)

2.00-4.00 P.M. Ear, Nose and Throat. (Gray

Drs. J. C. McDougall, Wm. Mc-
Dougall, Eguen, Colvin, Warren
and Burgess

Venereal Disease. Syphilis.

Dr. B. C. Duncan

Dermatology. (White Unit.)

Dr. Francis Jones

3.00-4.00 P.M. Communicable Diseases.

Dr. Abercrombie

7.00 P.M. Banquet. (Henry Grady Hotel.)

Dr. T. J. McArthur Presiding.

Speakers:

Dr. H. W. Cox, Pres. Emory
University on Emory

Reminiscences.

Dr. W. S. Elkin

Alumni Address. Oto-Rhinologic
Hygiene of Swimming.Dr. H. Marshall Taylor,
Jacksonville, Fla.

ALTERNATES

1. Syphilis in Relation to Heart Disease.

Dr. Abner Calhoun

2. Pericarditis.

Dr. Sanford

A PROBLEM IN CHEST DIAGNOSIS

(Continued from page 215)

lung in this case. The apices of the lungs were clear. The two dense, round shadows seen in the right lung have practically no inflammatory involvement of the surrounding tissues. However, no definite diagnosis can be made as the patient died in south Georgia and no autopsy was performed.

Conclusion: Carcinoma of the lung is a rare condition and is extremely difficult to diagnose absolutely except at autopsy. The above case shows us the necessity of routine microscopic examination of all tissues removed at operation. It also shows us the importance of performing an autopsy on every case in which there is the least possible doubt as to the diagnosis.

GEORGIA TUBERCULOSIS ASSOCIATION

MODES OF INFECTION

(Continued from page 224)

infection, most cases of adult disease probably should be considered as being really secondary to and metastatic from the lesions of the early infection of childhood. It is possible that some cases do not follow this course, and that a second infection does occur in adult years. In other words, it is by no means certain that infection from without does not occur, occasionally, following childhood.

It is evident though that in considering infection with the tubercle bacillus, the earlier years of life must be considered as the most important period, and inhalation as the most important factor in acquiring infection.

THE MINNEAPOLIS SESSION

TRANSPORTATION

The Southeastern Passenger Association has just informed us that it, too, has extended its final honoring date to June 29.—Journal A. M. A., May 12, 1928.

EMORY UNIVERSITY ALUMNI

MEDICAL CLINICS

JUNE 4-8, 1928

BULLET IN LUNG

The case reported by Chevalier Jackson, Philadelphia (Journal A .M. A., April 21, 1928), illustrates a new method of using magnetism as an aid in the bronchoscopic removal of a foreign body from the lung. A soldier was wounded in action and was found to have a compound fracture of the left side of the lower jaw. The wound healed, the fracture united with slight deformity, and the patient was honorably discharged. Later, cough and expectoration developed, with pain in the left side of the chest; fever and hemoptysis supervened, and the patient became quite ill. A roentgen-ray examination revealed a shadow of a machine-gun bullet in the upper lobe of the left lung. As there was no wound of entrance other than the one on the lower jaw, and no evidence of a wound of exit other than the pharyngeal, it seemed probable that the bullet had been nearly spent and had penetrated only as far as the fauces, whence it was inspired into the lung. It was therefore evident that the bullet had been in the lung for ten years; and this was corroborated by the roentgen-ray shadows indicating pathologic changes characteristic of prolonged sojourn of a foreign body. The bullet was located in a cavity in the left upper lobe. The 5 mm. bronchoscope was inserted and pus was found coming from the orifice of the left upper lobe bronchus. By strong displacement of the descending branch of the upper

lobe bronchus was entered with the tube mouth for a distance of about 3 cm. The special upper lobe bronchus forceps number 7 was inserted with fluoroscopic aid. When the forceps reached the wall of the cavity it was found that the fistula was also closed. The forceps were gradually insinuated through. It was noted that the forceps indented the proximal wall of the cavity before penetrating it. After the forceps entered it was noted that the bullet was free to move in the cavity and that the entrance of the forceps displaced the bullet to the extreme upper portion of the cavity, where it was out of reach "round the corner." The following day Sweet's magnet was applied externally to the chest wall. When the current was turned on the bullet was jerked down from its high position striking the bottom of the cavity with an impact that was felt by the patient. The bronchoscope was introduced as before and on insertion of the upper lobe bronchus forceps number 7 the bullet again flew up to the top of the cavity. Sweet's magnet was applied externally to the chest wall under the lower border of the lowest rib. The bullet was promptly jerked down to the bottom of the cavity and was held there by magnetic force until the bullet could be grasped with the bronchoscopic upper lobe bronchus forceps. About fifteen minutes of moderate careful traction was required for sufficient dilation of the strictured fistula to permit withdrawal of the bullet. There was no reaction.

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THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA

DEVOTED TO THE WELFARE OF THE MEDICAL PROFESSION OF GEORGIA
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Volume XVII

Atlanta, Ga., June, 1928

No. 6

PRESENTATION OF CRAWFORD W. LONG MEMORIAL PRIZE TO DR. M. HINES ROBERTS*

WILLIAM R. DANCY, M.D.
Savannah

For many years it has been the earnest desire of the Medical Association of Georgia to stimulate original work within its membership. It has endeavored for a long time to obtain a prize to act as an incentive. For years it was urged in the annual addresses of the several presidents. Two years ago, 1926, a generous donor, deeply interested in the advancement of medicine, offered such a prize and so magnanimous was the spirit of his gift, that he made it a specific condition that his name be kept secret. This was a manifestation of a most modest and unselfish trait; a necessary attribute of truly great and generous men.

This prize was presented through your humble servant and is known as the Crawford W. Long Memorial Prize. It is valued at two hundred and fifty dollars (\$250.00) and is a very handsome token and one of which the winner should be most justly proud.

The contests for this prize are held under the supervision of a committee. The requirements are, that the papers must contain original thought and work, and that they must be presented by members of this Association in good standing, at the annual meeting of the Association and published in the Journal of the Medical Association of Georgia.

After the presentation of the paper, five copies are sent to the committee and the individual members of the committee render their decisions to the chairman.

The executive committee of the Association

is advised of the final decision and the winner is likewise congratulated on his success.

The prize is presented at the annual banquet of the Association each year.

Last year there were nine contestants for the prize, presenting some very able essays and the winner should experience a great sense of joy in winning over such worthy competitors. It gives me great pleasure to announce to you formally that the winner of the Crawford W. Long Memorial Prize for 1927 was Dr. M. Hines Roberts of Atlanta. His essay was on "Some Observations in Pigment Metabolism in the New-born."

Dr. M. Hines Roberts, representing a generous donor, I take great pleasure in congratulating you and in presenting to you tonight the first Crawford W. Long Memorial Prize, awarded for superiority in original work in medical science.

The greatest reward for a major accomplishment well rendered is the self-satisfaction derived therefrom. The next is the respectful recognition by your fellow men of the ability which produced this accomplishment. We are here this evening to do you honor, sir, in behalf of your splendid efforts which have resulted in the winning of this Crawford W. Long Memorial Prize.

This has designated you a master mind in medicine. One possessed with attainments which elevate you to that chosen sphere, where you will be classed with those unselfish characters who are willing to use a superior mentality in the unselfish endeavor of original work in medical science. You are most highly commended for these splendid traits of mind and being which stamp you as a worthy victor in this contest.

This prize, beautiful indeed, fashioned out of the purest of gold without a mar, without a blemish, expresses precisely what the generous donor would wish it to accomplish for the medical profession—a profession with the

*Read at the Annual Banquet of the Medical Association of Georgia, Savannah, Ga., May 10, 1928.

purest endeavor, without a mar on its escutcheon and without a blemish on its horizon.

This Crawford W. Long Memorial Medal is an oblong square of gold. On the face, at the top, is an old-fashioned lamp or urn from which burns the eternal flame of ambition. May its fire never grow less. About the urn is a wreath of leaves and flowers in all stages of development. Those with full grown petals indicating your well developed thoughts of today; the unblown buds suggesting those which are to emanate from your fertile mind in the future. Below this is inscribed "Crawford W. Long Memorial Medal." On the back, or opposite side we find engraved "Presented to Dr. M. Hines Roberts for the best Original Research Essay read before the Medical Association of Georgia."

Dr. Roberts, my admonition to you is to display this handsome emblem where'er you may, that the profession in general and the world at large may know of your splendid achievement. Be not too modest to display this evidence of your success.

In behalf of the donor, of the committee, and of the Medical Association of Georgia, I express the wish that your interest in medical science may never lessen, that your success in life be most profound and that blessings eternal rest upon your splendid efforts in behalf of scientific medicine.

ADDRESS ON DELIVERING BADGE OF
SERVICE TO DR. WILLIAM A.
MULHERIN, PRESIDENT*

R. L. MILLER, M.D.
Waynesboro

Mr. Toastmaster and Gentlemen:

The story is told of a man in a town in Tennessee, not Dayton, who ran very excitedly into a police station exclaiming, "I have killed a man." The officer in charge paid no attention to him. He began again, "I tell you, man, I have killed a man." Finally the officer asked, "Whom have you killed?" The man replied, "I have killed an after-dinner speaker." The officer immediately replied, "You are in the wrong place. Report at the

mayor's office at nine o'clock in the morning and you will receive your reward."

I am glad that I appear as a regular part of the program of the Association and not as an after-dinner speaker, else I might meet with the fate of this Tennessean.

When this most pleasant duty was assigned to me, remembering my limitations, there was very good reason why, without any unwillingness to serve, I might have declined. I found myself, very much in the same position as a negro soldier, who was stationed at Camp Jackson, during the World War. He had a sweetheart in Augusta whom he desired very much to see. He made every effort to obtain a leave of absence, that he might visit her. Meeting with failure at every turn, he decided he would slip out of camp. So under the shades of night he started. He was soon stopped by a negro sentinel, who demanded to know where he was going. Drawing himself to his greatest height, and assuming a most desperate air, he said, "Look here, nigger, I is got a mother in Heaven, a father in hell, and a gal in Augusta and I is going to see one of 'em tonight." So, gentlemen, I have a friend in Augusta, of whom I am very fond and about whom I wish to say a few words.

But seriously, gentlemen, why are we here?

That is alike the most engaging and the most serious question which any man or group of men can ever face. It is fundamental and determining. The answer which we individually and collectively give determines our philosophy of life, supplies the motives for our day's work, furnishes the clue to our characters and measures the worth of our achievements.

The Medical Association of Georgia in annual session might easily answer this query by having re-read the purposes and objectives of its organization. Or we might say to ourselves that we have foregathered in order to pool our intelligence, and to review our findings in the limitless field where we explore; and out of such an interchange of ideas be more adequately equipped for the high and holy calling to which we have consecrated ourselves. Or we might answer that we are here to ponder and to appraise the ever new discoveries which modern science brings

*Delivered at the Annual Banquet of the Association, Savannah, May 10, 1928.

yearly to our doors, and to interpret their significance for the well being of our human kind. Or again we might answer, we are here to remind ourselves that we belong to an ancient and honorable order, that we walk in a notable succession, that the men of our calling have walked in that immortal procession who have been the pioneers of a new day and the torch bearers of a new civilization. We have, as fellow seekers in the quest of truth, and fellow workers in the service of humanity, reasons for just and pardonable pride.

To understand how vital this question is, we have only to remember that the philosophies and the religions of the world have been built around it. Back of all our work for the world, and antedating our choice of the particular area in which we are making our contribution, there is this basic principle which must be settled, and that is, why are we to work at all? and what is the goal of our effort? and what is the impelling motive? Briefly considered, there are two theories with respect to the conduct and purpose of life. The first is egoism. This was the ideal of the Greeks. It is based on the atomistic conception of society. Every social holding is composed of individuals, the nature of each of whom is to preserve his own life, to seek his own good, and to satisfy his own desires. It is the law of self-realization that makes one's own good the only object of endeavor. The strength of that theory lies in the fact that it encourages a man to develop his powers to the highest form of efficiency. In a sense every man must be an egoist, for he must first of all have a care for the cultivation and development of his own gifts and powers, or else there will be no quality in the contribution he makes to his generation. The weakness of this theory is that it ignores the purpose of all community life, refuses to recognize the solidarity of mankind, makes every man a law unto himself and overlooks what science and scripture have made increasingly plain,—and that is, we are tied up together in the bundle of life.

The other conception of life is altruism. That is the product of the Hebrew mind. It finds classical expression in the biography of Abraham who was blessed in order that he

might be a blessing. It means, "otherness," and its controlling idea is consideration for others, the trusteeship of our knowledge, of our gifts, and our personalities. The weakness of this theory is that it does not take into account the quality of the service we are to render. A man may honestly desire to be an altruist, but unless he has money, his benevolent impulses are estopped; without knowledge he cannot be an educator, without skill he is incapacitated for deftly dealing with the delicate tasks that we as medical men are daily confronted with.

Which of these theories shall a man choose, egoism or altruism? It is not a matter of "either-or," but "both-and." It is only in the balancing of these two theories, and in merging them that we have the complete theory of life. It is only as we have egoism joined to altruism that we are qualified to render an intelligent and permanent contribution to the real program of the world. How nobly this combination of self-development and "otherness" has been incarnated in many shining personalities of our own profession! What a galaxy of stars there are! One thinks of Pasteur who lived laborious days, who scorned delights, who gave himself utterly in order that he might add something to the healing forces of the world. What a challenge, what an inspiration is his life. How romantic is his story. What a rebuke it is to our time-serving and crassly materialistic age. One thinks of how many sought to have him commercialize his scientific findings, but how instead he put freely at the disposal of mankind the discoveries he had made. When one thinks of this noble and immortal soul there comes unbidden the words of the divine physician, who for all times set the example of what human life should be: "For their sakes, he said, I consecrate myself." Here then is the complete theory of life. Here then is the answer of our question, "What are we here for?" We are here to develop our faculties to the highest possible degree in order that we may become channels of enrichment and healing to our less privileged brothers.

Let me here make emphatic another consideration, and that is we must believe that

we are worth developing, and that others are worth helping. In a word, our philosophy of life must rightly estimate the meaning and value of man. Here is one of the most insidious dangers that must ever befall professional men, and particularly physicians. It is just this: to think of man only as body. What then shall we think of people who seek our services? Shall we think of them as bodies only, or rather shall we not think of them as children of the eternal, in whose bodies are encased an immortal spark?

With this evaluation of man shall we thus worthily serve our day and generation. Thus shall we win the gratitude of men and the approval of God.

Dr. Mulherin, after an acquaintance of twenty years in which it has been my good fortune to know you intimately, it affords me great pleasure to say that you have measured up to these ideals.

You possess enough of the ego to stimulate you to the highest development of your faculties, but without any of the obnoxious traits that are so often characteristic of the egotist. No one who knows you, will for one minute ascribe to you a want of interest in all community life or of living to yourself. I know of no one in our Association who realizes more fully than you that we are tied together in all of our endeavors.

During all of these years your beautiful spirit of altruism has been an inspiration to me. Many times when I have faltered your spirit has encouraged me to press on.

I know of no one in whom this combination of self-development and consideration for others is so beautifully blended as in you. In short, you have at all times measured up to what my conception of the truly great physician should be.

Your services, as President of this Association, are too well known to every member of it to need any words of commendation from me, they speak for themselves. It, therefore, gives me great pleasure, in behalf of the Medical Association of Georgia, to present to you this Badge of Service, realizing that no man, who today has the honor to wear one, does so more worthily than you.

PNEUMONIA*

A TYPE OF FREQUENT OCCURRENCE AND OFTEN THE CAUSE OF SUDDEN DEATH

CASE REPORTS†

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During the past five years, in the course of routine autopsy work, we have been impressed with the fact that pneumonia is frequently the cause of sudden death. This kind of pneumonia, however, differs from the usual lobar and lobular types and the patient succumbs very early in the attack. Such an opinion has been arrived at by correlating the pathology with the onset of the illness and the manner of death.

This fulminating type of pneumonia deserves more recognition than has previously been given; especially since the individual may die suddenly unaware of any existing disease of the lungs, and in our experience, such a condition is rarely recognized clinically. We desire then primarily to call attention to the fact that there occurs a type of pneumonia, which may rapidly prove fatal, has a distinctive pathology, and is of frequent occurrence; and also to present the pathologic findings and illustrate with a few case reports.

It was soon after the occurrence of the late epidemic of influenza that our attention was directed to such cases, therefore, they were not considered unusual. However, now after a period of some seven or eight years, cases occur with the same degree of frequency as occurred earlier in the postepidemic period. We can hardly believe that this disease is confined at the present time to this locality; and unaware of any recent similar reports on this type of pneumonia, we wonder if such cases are being overlooked.

That this disease is related to influenza is evidenced by the fact that the pathology is similar to that observed at the various military encampments during the pandemic.^{1 2 3} In our experience, however, it is to be noted

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that this type of pathology is found in these cases of sudden death, and that it is rarely found in the other forms of pneumonia, with which we are familiar.

The morbid anatomy is so striking that these cases can readily be recognized in the morgue without a previous knowledge of the course of the fatal illness. Since becoming familiar with the pathology, we have collected a few cases from our hospital records and thus have a clinical history; naturally, however, because of the suddenness of the death, only a small amount of information is obtainable. Most of the cases are those that have died suddenly on the street; or, while indisposed with what was considered a minor ailment, were found dead. Death occurs sometimes when the individual is at work, and in many instances after having completed a day's work. Rarely has a physician been consulted. In such instances, the attending physician was entirely unaware of the gravity of the illness, except when the patient was seen just prior to death. This experience, too, is similar to that of the hospital staff here.

We have found the condition more frequently in the negroes than in white persons. While this may be due to the fact that more autopsies are performed on negroes than on white persons, we think that it is probably due to the disregard of ailments which is more characteristic of the negro race than of the white. It occurs about equally in the males and females. The youngest individual in our series is nine years of age, while the oldest is fifty. Most of the cases, however, occur in the second and third decades. The time of occurrence is in the Autumn, Winter, and Spring.

The manner of death is that of pulmonary edema. In those patients under observation, this was readily apparent. In those found dead, it was indicated by the inundation of the respiratory system with frothy fluid. The edema comes on suddenly and may cause death within a few moments or within a few hours. Much frothy or bloody frothy fluid is expectorated by coughing, or even flows from the nose and mouth with respiration. Consciousness may or may not be retained. The patient literally drowns in his

own secretions, and after death much of this frothy fluid flows from the nostrils and the mouth.

The diagnosis, at autopsy, is often suspected when the anterior chest wall is removed. The lungs are voluminous and do not collapse. Nor do they collapse, even when sectioned. Usually the pleural cavity contains no free fluid, but there may be a small amount which is sometimes blood-stained. The surface of the pleura is smooth, usually congested and dull, swollen, and minute petechiae may be present, particularly in the visceral pleura.

The lungs besides being voluminous are very heavy. They are no longer elastic, and sometimes tear readily. The condition is usually universal. The consistence is increased generally. There may be some slight variation in the degree of consistence, which is usually due to a more marked increase in the dependent portions. Crepitation can be elicited throughout the lungs, but rarely there may be small areas of solidification. The cut surface is fiery red in color, very wet, only slightly granular; the blood vessels are congested, so that much blood flows from the cut vessels, and even without pressure much frothy and sometimes bloody fluid exudes from the entire surface. Occasionally small irregular areas of hemorrhage are noticeable. Fibrinous plugs are not demonstrable except when there are small areas of solidification, which, however, is the exception rather than the rule, death intervening before much fibrinous exudation takes place. Mucopus can be expressed from the cut bronchioles.

Microscopically the picture is as typical as in the gross. There is always present a marked active congestion and edema, and usually there is escape of blood into the alveoli so that they frequently contain mononuclear cells laden with granular brown pigment. The interstitial tissue of the lung may be edematous, and irregular patches of necrobiosis of the alveolar walls are commonly seen. In a few instances this is the only pathology. There, however, is generally some cellular exudate composed of polymorphonuclear leukocytes, exfoliated epithelium, and a few lymphocytes. As a rule,

this is small in amount but occasionally there may be much cellular exudate which is somewhat patchy in its distribution. These differences with regard particularly to the presence of a cellular and fibrinous exudate are apparently due to the age of the process. Such differences in the characteristics of the exudate are sometimes noticeable in the same case in different portions of the lung. For example in case number 26-97 there was intense congestion and edema of the right lung and slight hemorrhage, while in the left lung there was an extensive cellular exudate composed of polymorphonuclear leukocytes, large mononuclear cells and some red blood cells, with extensive necrobiosis of the alveolar walls; only the larger trabeculae and blood vessels were distinct. Very occasionally is fibrin noticeable in the routine stained microscopic sections. The congestion and edema with necrobiosis of the alveolar walls and escape of red blood cells is the most distinctive feature of the microscopic pathology. The walls of the bronchioles are edematous and generally infiltrated with a few polymorphonuclear leukocytes and the mucous membrane is exfoliated. In stained films from the lungs, organisms, with the characteristics of streptococci, or pneumococci, or both are found in numbers, both extra- and intracellularly.

The mucosa of the trachea and bronchi in all instances is congested and swollen, and there is much mucus and frothy fluid in the lumen. Usually the peribronchial lymph nodes are swollen and edematous.

Occasionally there is a slight excess of fluid in the pericardial cavity and the pericardium at the base of the heart may be congested and granular.

A slight excess of peritoneal fluid is frequently present.

The liver is swollen, cloudy, and often may contain an excess of visible fat. In one instance we observed focal necrosis.

The spleen, while generally enlarged from hyperplasia and active congestion, is rarely enlarged to any considerable extent. The largest spleen that we have found in such a case weighed 290 grams; and it is interest-

ing to note in this case that there was little cellular exudate in the lung. Occasionally, however, the spleen may not be enlarged at all.

The kidneys usually exhibit cloudy swelling, both macroscopically and microscopically.

In some instances the stomach is markedly distended especially in those who have recently partaken of a meal. The intestines, too, are sometimes distended.

The blood is generally fluid and it is not uncommon to find hemoglobin imbibition in the endocardium and the endothelium of the large vessels. Jaundice is occasionally present.

While some of these cases present other pathological conditions, these latter appear to have little bearing on the fatal issue of the disease. Such incidental pathological findings are mentioned in the case reports. A few representative and illustrative cases are presented with that history obtainable from those associated with the individual at the time of his death.

CASE REPORTS

23-27. J. E., negro male, age 36. Died 12-6-23. Admitted to the hospital with a diagnosis of duodenal ulcer and hemorrhage. On admission the hemoglobin was 25%. He was treated by blood transfusions and general medical treatment for three weeks preparatory to surgical intervention. At operation an ulcer of the duodenum was found and removed. His post-operative condition remained good for six days. There was no elevation in temperature, nor increase in the rate of the pulse, or respiration. On the sixth day after operation, at ward rounds, the patient stated that he felt good and had spent the most restful night that he had experienced for some time. At 1:30 P. M., he began suddenly to vomit yellow fluid, and with each respiration fluid would flow from the mouth. After one cough much fluid flowed from the nose and mouth and he died within five minutes.

Summary of Autopsy. Healing incision in mid-abdomen. Yellow fluid comes from the nose and mouth. Of the brain there is nothing unusual.

The lungs are voluminous and stiff; uniformly increased slightly in consistence; the cut surface is fiery red, very moist, and large quantities of frothy fluid flow readily from the cut surface. Microscopically—there is

generalized congestion and edema; small foci of hemorrhage into the alveoli; many pigmented mononuclear cells occur throughout; patches of alveoli contain along with the serum some few polymorphonuclear leukocytes, and a very small amount of fibrin, and in these patches the alveolar walls are necrobiotic. Even in those alveoli containing exudate there is air which pushes the exudate to the side. A few of the alveoli are distended. Some of the alveolar walls are edematous. There is marked congestion and edema of the walls of the bronchioles with exfoliation of the epithelium. The walls are infiltrated with polymorphonuclear leukocytes.

The trachea and bronchi contain large quantities of frothy yellow fluid. In the lower one-third of the esophagus there is suppurative inflammation of the mucosa with ulceration and granulation. The peribronchial lymph nodes are slightly increased in size. There is cloudy swelling of the liver and small areas of focal necrosis. The spleen weighs 165 grams; there is hyperplasia and congestion. The stomach is markedly distended with gas and yellow turbid fluid. Part of the pyloric end of the stomach and the proximal part of the duodenum are absent. The surgical wound is healing and the stoma between the stomach and jejunum is patent and sufficient.

Anatomical Diagnoses:—Broncho-pneumonia; cloudy swelling and focal necrosis of liver; dilation of stomach; suppurative esophagitis; gastro-jejunoscopy and absence of part of the stomach and duodenum.

27-16. A. R., white male, age est. at 45 years. Died 3-25-27. Worked the day of death; retired before nine P. M., apparently well. It was noticed by a fellow roomer that while sleeping his breathing was heavy. At eleven P. M., he awoke and complained of stomach trouble. In the morning he was found dead in bed.

Summary of Autopsy:—There is a slight excess of clear fluid in the peritoneal cavity.

The lungs are voluminous. Emphysema in the anterior portions of both lungs. The lungs are very heavy; the consistence is increased throughout, slightly more in the dependent portions; crepitation is present throughout. On section the cut surfaces are very wet, and markedly congested, much fluid blood flows from the cut vessels and much frothy fluid from the entire cut surface; the cut surfaces are cloudy. Microscopically—there is marked active congestion and edema. There are small areas of hemorrhage, and necrosis of the alveolar walls. Many pigmented mononuclear cells

are in the alveoli. In a few alveoli there is slight exudation of polymorphonuclear leukocytes. Congestion and edema of the bronchioles with shedding of the epithelium; infiltration of the walls with a few lymphocytes and polymorphonuclear leukocytes.

The pericardium at the base of the heart is congested, dull, and slightly granular. Marked congestion of the mucosa of the trachea and bronchi. Cloudy swelling of the liver with an increase in the amount of visible fat. Of the spleen there is nothing unusual. Cloudy swelling of the kidneys. The stomach is markedly distended and contains a large quantity of partially digested food. The blood is fluid throughout.

Anatomical Diagnosis:—Pneumonia; congestion and edema of lungs; cloudy liver and increase in the visible fat; cloudy kidneys; distention of stomach and small intestines; simple pericarditis; emphysema; chronic prostatitis.

27-20. H. C., negro male, age est. at 40 years. Died 4-4-27. Slightly indisposed early in the morning; took some soda. It was then noticed that he began to breathe heavily. To facilitate breathing he was propped up in the bed. Died within a few moments. Had been working every day.

Summary of Autopsy. There is a slight yellow color to the skin and sclerae. The peritoneal cavity contains a slight excess of fluid.

The pleural cavity contains a few c. c. of clear fluid. The pleural surface of the right lung posteriorly at the base is congested, dull, and there are a few petechiae present. The lungs are voluminous, heavy; the consistence is increased generally, slightly more so in the posterior portion of the right lung. On section the cut surfaces are very wet and fiery red in color. A light frothy fluid exudes from the cut surface. Microscopically—there is a marked congestion and edema; there are many pigmented mononuclear cells in the alveoli; very slight cellular exudation of lymphocytes and polymorphonuclear leukocytes. There is shedding of the bronchial epithelium.

The pericardial cavity contains a slight excess of clear fluid. The heart is hypertrophied and cloudy, and microscopically there are small areas of fibrosis in the myocardium. The mucosa of the trachea and bronchi is swollen and congested. The peribronchial lymph nodes show old focal tuberculosis. There is cloudy swelling of the liver and increase in the visible fat. Hyperplasia and congestion of the spleen. The spleen weighs 290 grams. There is marked cloudy swelling of the kidneys.

Anatomical Diagnoses:—Pneumonia; hyperplasia of spleen; cloudy viscera; jaundice; fibrous myocarditis; hypertrophy of heart; old focal tuberculosis of peribronchial lymph nodes.

26-97. Mrs. J., white, female, age est. at 25 years. Died 10-23-26. Had been complaining of some ailment for four months and was being treated for same by a negro conjure doctor. The day of death she complained of feeling weak, being nervous, and of shortness of breath and pain in the chest. Died rather suddenly after drawing one deep breath.

Summary of Autopsy:—The pleural cavity on the left side contains about 25 c. c. of clear fluid. Over the lower lobes of both lungs the pleura is dull, congested, and a few petechiae are present. The lungs are voluminous; the consistence is increased generally; and in the left lung the lower lobe is heavier and there are two ill-defined areas posteriorly about 3 cm. in diameter where crepitation is barely present. Elsewhere the left lung crepitates. On section the cut surface of the entire left lung is very wet and yields a large amount of frothy fluid; much blood flows from the cut vessels. The lower lobe is fiery red in color, granular, and some purulent material can be expressed from the cut bronchioles. The consistence of the right lung while increased generally, is uniform; crepitation is present throughout. On section the entire cut surface is fiery red in color and exudes a considerable amount of frothy fluid. Microscopical section of the lower lobe of the left lung shows much cellular exudate composed of polymorphonuclear leukocytes and mononuclear cells. There is much serum and some red blood cells in the exudate. The alveolar walls and the bronchioles are not recognizable. Microscopical section of the right lung shows an intense congestion and edema with some slight hemorrhage. The alveolar walls are in a poor state of preservation. The bronchial walls are congested and edematous, and the epithelium is necrotic. A few polymorphonuclear leukocytes are present in the walls. There is marked edema of the pleura.

The mucosa of the trachea and bronchi is congested and swollen. There is much mucopurulent material in the lumen. The peribronchial lymph nodes are enlarged and moist. The liver is in a state of cloudy swelling and there is an excess of visible fat. The spleen weighs 180 grams, there is congestion and hyperplasia. There is a small calculus in the pelvis of the left kidney with some excavation of the pyramids and a local area of suppurative pyelonephritis. Gener-

alized hemoglobin inhibition.

Anatomical Diagnoses:—Pneumonia; hyperplasia of spleen; suppurative pyelonephritis and nephrolithiasis.

27-88. L. W. S., negro female, age 30. Died 9-21-26. She was apparently well and ate a large meal. After the meal while in the yard she fell and was found unconscious; vomited. She was sent immediately to the hospital. Upon admission she was in a state of coma. The blood pressure was 100-60; Rales and tubular breathing were heard over the lungs. The temperature on admission was 102° and gradually rose to 104°. The pulse remained around 120. Respiration at admission was 36, gradually rising to 72. The blood Wassermann was four plus. Leukocyte count of 16,000. She died within 24 hours without regaining consciousness.

Summary of Autopsy:—Brain is negative.

The pleura is congested but smooth. The lungs are voluminous and there is a generalized increase in consistence. On section they are fiery red and very wet and much frothy fluid flows from the cut surface. Microscopically there are large irregular patches of polymorphonuclear leukocyte infiltration with necrobiosis of the alveolar walls. There is generalized congestion and edema, and some escape of blood into the alveoli. Many pigmented mononuclear cells are present. The alveolar walls are edematous. The walls of the bronchioles are congested, edematous, and infiltrated with polymorphonuclear leukocytes; there is exfoliation of the epithelium.

The mucosa of the trachea and bronchi is markedly congested and swollen. The liver is cloudy and contains an excess of visible fat. Of the spleen there is nothing unusual. Marked cloudy swelling of the kidneys.

Anatomical Diagnoses:—Broncho-pneumonia; fatty liver; cloudy swelling of kidneys.

SUMMARY

1. A type of pneumonia, which is of frequent occurrence, and not generally appreciated, is described.

2. It is often the cause of sudden death.

3. It is similar to what occurred in some camps during the influenza pandemic of mobilization.

4. It has occurred with the same degree of frequency during the past five years.

5. Illustrative cases are reported.

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PRESENT INTERPRETATION OF URTICARIA*

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Urticaria not only embraces the skin but everything therein. It is no respecter of persons, age, color, clime or social standing. It is a disease of the ignorant and learned, however it is largely confined to the civilized races, and the higher the degree of civilization, the more prevalent the disease. It is classed and given a name as a disease, but it is not a disease, only the symptom of disease. It has been truly said, "know syphilis and you know medicine," and the same may be said of Urticaria.

Urticaria is an acute or chronic disorder of the skin characterized by the presence of wheals, which induce varying degrees of itching, tingling and smarting sensations.

Several types of the disease exist. In acute types, the pre-eruptive symptoms are often malaise, headache, slight elevation of temperature, lasting from a few hours to a day. The lesions in this type are raised spots on the skin, known as wheals, which vary in color from a pale to a bright red, and in size from a pea to large gyrate patches; the duration may be from a few minutes to a few hours. Their disappearance usually coincides in speed with their appearance, however if the sufferer persists in scratching or continues to be influenced by the immediate cause, new wheals may continue to appear and disappear. The location of the wheals are indefinite; they may occur on any part of the body, or on any of the dermo-papillary mucous membranes, but there is a predilection to locations on the buttocks, back, sides of the thighs and extremities, with rarely any lesions on the face, scalp, hands and feet, although these locations are by no means immune.

The angio-neurotic type usually involves the soft cellular tissues such as the tissue around the eyes, mouth and labia.

Urticarial lesions in the mouth are rare, but when they involve the mucous membrane of the pharynx it often gives rise to alarm-

ing symptoms, but in the majority of cases these symptoms are only temporary.

In the chronic type of urticaria many of the lesions are similar to the first type; as a rule, the lesions are much smaller, the majority are papular, small nodular rather than wheals and they vary more in shape. New lesions continue to appear before the older ones disappear.

The rare types of urticaria I shall mention briefly. The bullous type of urticaria is that form of urticaria in which the lesions become capped with a vesicle or bulla or in which the wheals are rapidly displaced by bullae. When these lesions constitute the larger part of the eruption they often suggest pemphigus or the bullous type of erythema multiform or dermatitis herpetiformis.

The lichen or papular type of urticaria occurs most frequently in children; the lesions are smaller, more discrete, of longer duration and the majority are found on the extremities.

The facticia type of urticaria, if it can be classed as such, is due to the irritability of the skin when subjected to irritation such as trauma, etc. This type, as a rule, lasts only a few minutes and seldom itches. Many persons, apparently in good health exhibit the symptoms of this type when the skin is traumatized.

The pigmentosa type of urticaria, which is very rare, usually begins early in life with small recurrent papules and as they disappear leave the skin deeply pigmented; however new lesions continue to appear until adult life. The pigmentation persists indefinitely. The cause of this type, as a rule, is more difficult to determine than the other types; it is held by many to be due to disordered, internal secretions.

The diagnosis of urticaria, as a rule, is very simple, but in the rarer, unusual types, when complications are present the diagnosis is more difficult.

The eruption of urticaria causes intense itching; scratching and the application of irritants are often resorted to, in an attempt to get relief, causing inflamed patches and in many cases secondary infection takes place with pyogenic or parasitic organisms or both, which makes the diagnosis at times

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difficult. The absorption of toxins from these patches also causes the disease to persist long after the primary cause has been removed.

Urticaria of all types has many causes and frequently the cause cannot be definitely determined. It is generally held that the majority of cases are allergic, although as Klauder and others have shown, the agent causing the reaction is often difficult to determine and in many cases a multitude of factors are involved.

The toxic substances that cause urticaria, may be introduced from without or manufactured within the body. The foods that most frequently cause urticaria are eggs, seafood, especially lobster, shrimp, clams, crab, oysters, roe, pork, sausage, strawberries, tomatoes, canned meats, nuts, dried beans and peas. Many times it is the quantity of the food or foods eaten rather than sensitization to a particular food or group of foods.

The relationship between intestinal disorders and urticaria is well established; the most frequent disorders are so called intestinal indigestion and constipation.

Barber, a British dermatologist, believes that in the majority of cases of chronic urticaria, the underlying cause is a sensitization to bacterial rather than food protein.

Menagh in a series of 260 patients with urticaria (the majority being past middle life) held the opinion that 30 per cent were caused by the absorption of food and other foreign protein. 48.8 per cent had disease of the biliary tract which was the only etiologic factor found. 11.2 per cent had biliary tract disease and were absorbing other types of foreign protein; 10 per cent no cause determined.

In reviewing the cases of urticaria I have seen in the past five years, I find the majority had or recently had had some focal infection; or had the symptoms that would lead one to suspect their having one or more of the following infections: pyorrhea of the gums, abscessed teeth, tonsillitis or enlarged infected tonsils, infected antrums, sinuses, rheumatic pains, arthritis, colitis, endarteritis, pyelitis, cystitis, cholecystitis, infected ovaries, tubes and uterus, appendicitis, influenza, malaria and syphilis. Malaria is often over-

looked as being the cause, especially is this true when the plasmodia are not found in the blood.

Two per cent of my patients had chronic malaria, one per cent gave history of having had symptoms of malaria; all of these were apparently cured by the administration of quinine.

Hazen found in a series of eighty nine dispensary patients with chronic urticaria, twenty eight had a positive Wasserman reaction and were cured by giving antisyphilitic treatment.

Wright, Paramour and others hold that lack of lime salts in the blood with resultant tardiness in coagulability is an important, if not essential factor in causing urticaria. The latest and most extensive studies of Greenbaum have disproven this theory, in that the estimation of the calcium in the blood of sixty three patients with urticaria, all showed normal except one.

McKaskey found a small per cent of his patients with urticaria had a low alkali reserve and thought this was a contributing, if not the primary cause in these cases.

McGlassen-Ayres in a series of their patients with urticaria, found that from eight to nine per cent had hyperglycemia (with absence of sugar in the urine) due to excess of carbohydrates, all of these were cured by regulating the diet.

The deranged function of the glands of internal secretion, are directly or indirectly the cause of urticaria in a few cases, especially when the thyroid gland and ovaries are involved.

Drugs are often a direct or indirect cause of urticaria: indirectly their presence give rise to conditions favorable to substances, that are capable of stirring up trouble, in sensitized individuals. Drugs in common use which often cause this, are arsenic, especially when administered intravenously, all of the coal tar synthetics, hypnotic and pain relieving drugs such as allonal, luminal, sulphonal and trional.

Urticaria frequently follows the administration of vaccines and serums and anti toxins; when the attack is delayed from two to three weeks, they may be overlooked as the cause.

In a few cases of urticaria, emotional or

psychic causes such as anger, fright, or sudden grief, or anything that gives rise to profound nervous disturbances must be looked upon as of some import.

In chronic recurrent types of urticaria the disorder often taxes the resources of the medical attendant to the utmost, and in many cases it requires the combined efforts of the internist, laboratory technician, radiologist and surgeon, as well as the dermatologist.

In all cases the cause should be sought for, and abnormal conditions found should be corrected when possible; restrict the diet, especially articles of food known to be or suspected of being the cause. The eliminative organs should be kept active by giving laxatives, large quantities of water to dilute and assist in the elimination of the poison, alkalies when indicated, and in severe cases adrenalin to control symptoms; the patient being treated rather than the disease.

In administering adrenalin, it is needless to say, care should be exercised or alarming symptoms may follow, particularly is this true if the patient is suffering from arteriosclerosis, dilated or weakened heart or hyperthyroidism.

A quick and fairly reliable method of estimating the activity of the thyroid gland during an attack of urticaria is as follows: scratch the skin with a sharp instrument and when the dermographism appears if hyperemic (a bright red line) hyperthyroidism is indicated; if ischemic (a pale or white line), hypothyroidism.

Several years ago food tests bid fair to give much information in regard to food causing attacks of urticaria, but after thorough tests, the results in the majority of cases were rather disappointing, and this method has since been abandoned by many of its former advocates.

The old method, as practiced by our forefathers, that is starvation, with gradual addition of one article of food at a time until recurrence of the eruption, gives in a large per cent of cases a fair insight to the foods that cause the disease. The advantages of this method are that it consumes less time, is painless and prevents more of the offend-

ing substance from being ingested and allows the intestines to recover.

The method of desensitizing patients against foods known to be the cause of urticaria, has been in use for several years; in a few selected cases it is of value.

The older method of withholding an article of food known to cause the disease is, in a large per cent of cases, the method of choice; it is more practical, painless, and offers no risk of shock which so often follows the injection of a foreign substance.

In a few obstinate and selected cases of urticaria, in which the cause cannot be determined, the injection of a foreign protein sufficient to cause a reaction (chill and elevation of temperature), for illustration the giving of typhoid bacterin, five million dead organisms every four to six days, frequently gives temporary relief and an occasional cure.

Wright and his followers advocated the administration of calcium salts, particularly the lactate, to overcome the coagulability of the blood. Clinically some benefit may be derived from their use; if Greenbaum's findings are correct, the promiscuous giving of calcium has no scientific basis.

The external treatment of urticaria should be confined to soft, non irritating clothing worn next to the skin, saline or starch baths, soothing, antipruritic applications, lotions such as calamine zinc with phenol, menthol or camphor.

In conclusion, in summing up the causes of urticaria, we find that the presence of a toxic substance and some peculiar, individual predisposition stand out preeminently. Internal and indirect causes are numerous but individual peculiarity is always a potent contributory influence, for the same cause may not produce the eruption in different subjects. In the majority of cases it is a protest of the system to the skin against continual imposition; usually this imposition has existed a long time through improper hygiene and diet. In some cases this neglect began through ignorance of the foreparents, it is the sins of the father visited upon the children, therefore more thought and consideration must be given to hygiene, diet and preventative medicine.

ARE WE FACING A NURSING CRISIS IN GEORGIA?*

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Are we facing a nursing crisis in Georgia?
I contend that we are.

On first thought, why should the members of the medical profession be concerned with the conditions surrounding and affecting nursing?

Why should deliberations of such scientific and busy organizations as this give space on their crowded programs to a consideration of situations affecting another profession?

I believe there are obvious reasons.

The practice of medicine rests primarily upon the needs of the patient. All conditions and personnel, therefore, affecting or contributing to meeting the needs of the patient become the immediate concern of the doctor of medicine.

The patient brings into relationship the practitioner and research worker in the various fields of medicine, nursing, economics and education.

These various fields and professions may be, indeed are, quite separate and distinct, but focus their contributions in the welfare of the patient and are successful to that end as they work in harmony of spirit and intelligence of endeavor.

Close co-operation and unity of purpose are absolutely essential. This is especially true of the doctor and the nurse, whose services are personal and interdependent. The methods of their preparation have, however, fostered individualism which has affected not only the doctors and the nurses themselves, but has extended to the institutions connected with their service.

The method of apprenticeship training is not suited to large numbers of students, nor the conduct of large institutions, and it has been a slow process to build real schools of nursing upon the old system. There are still a great number of institutions that cannot be considered schools in any sense of the word

—where indifferent courses of instruction and very poor records of work give the semblance of schools, rather than the reality.

The hospital has become a necessary adjunct to the successful practice of medicine. The nurse has come to be absolutely necessary in the conduct of the hospital.

Thus her own education has become secondary to the conduct of the hospital affairs.

This system has given rise to a very unstandardized and variably trained nurse, and out of it has grown much of the dissatisfaction with nurses.

Because of this, the leadership in medicine and nursing has recognized the great need of standardizing the schools of nursing throughout the country so that a more uniformly trained nurse could practice the art of nursing with greater and more certain skill.

There were other great factors that determined the need for such an undertaking. The rapid turnover in the staffs of institutions and schools of nursing, and the inability to secure nurses in the rural districts, led doctors to the conclusion that there was a shortage of nurses. Committees were formed by state medical societies to determine whether recommendations to shorten the courses and lower the entrance requirements to schools of nursing were not indicated to increase the number of nurses.

The nurses, seeing the problem from another angle, were attempting to solve it by improving the type of nurse and raising the entrance requirements and the standards affecting employment.

Then came the results of the three-year study of the Rockefeller Foundation, dealing with both these views, but not giving sufficient data to determine how to proceed to solve this great problem of good nursing to all the sick, under economic conditions suited to them. A more comprehensive study was clearly indicated.

The National League of Nursing Education had long appointed a committee to study the situation. The American Medical Association appointed a committee to confer with the League of Nursing Education. This resulted in a conference of a number of national groups, out of which grew the Committee on the Grading of Nursing Schools,

*Read before the House of Delegates at the Annual Session of the Medical Association of Georgia, Savannah, Ga., May 8, 1928.

with representatives of the three nursing organizations, the three medical organizations and the Hospital Association. These representatives selected seven additional members from the fields of education and the public, and a general practitioner of medicine.

The first step was to learn what the supply and demand of nursing service was and how the nurses were being prepared for what they were expected to do.

This in turn required some definition of what the nurse ought to know in order to nurse the sick. The Committee set about to learn what the doctor and the patient needed and demanded of the nurse.

A five-year program with definite steps of accomplishment was inaugurated. It covered three projects:

1st. The supply and demand of nursing service.

2nd. The preparation of the nurse for what is needed.

3rd. The actual grading of nursing schools.

No reliable data were available to show whether the number of nurses was sufficient, or the quality was satisfactory, or the method of education adequate and economic or wasteful.

Ten states were chosen in which to make a preliminary study of the service situation of nursing, to serve as a cross section of the country. They were Massachusetts, New York, Pennsylvania, California, Illinois, Kansas, Wyoming, Washington, Georgia and Louisiana.

The Committee has completed its first eighteen months of work and is about to publish its first monograph. The findings thus far are profoundly significant and startling in their implications!

Preliminary reports have already been issued through medical, nursing and hospital magazines, indicating that the private duty nurses of the country are not evenly distributed territorially, nor are their services economically used; but that taken by and large there is no shortage of nurses in this country. In fact, there are indications of an overproduction.

The United States Public Health Service reports 305,000 graduate nurses as practicing, though other estimates are somewhat lower.

The American Medical Association reports state that there are approximately 77,000 student nurses giving nursing care. These will in three years or less all be graduate nurses, and 77,000 others, presumably, will take their places. In short, a turnover of that number triennially.

Reports from the same source state that there were in 1926, 2155 schools of nursing. By 1927 these were added to by 131 schools, making a total of 2286. With each new wing of a hospital already maintaining a school, the student body is increased to meet increased demands for nursing care.

Georgia has more than her share of nursing schools—56. If all states had as many, there would be 2688 instead of 2286 in this country.

The experience of the medical profession should give us some idea of how to deal with this situation.

Dr. W. S. Rankin discussed the question of the supply and demand for medical service in the 1927 columns of the *Journal of the American Public Health Association*. He declared there was no shortage of medical service. The schools of medicine had been reduced from 160 to 90, with little actual reduction of medical students. That there were 145,000 physicians in the country then. The American Medical Association reports show about 19,500 medical students in the various medical schools, and a further reduction of schools to 79.

However, though the ratio of doctors to population is deemed adequate, the distribution between urban and rural populations is very unequal. Comparisons of medical and nursing educational facilities and medical and nursing personnel should set us thinking.

Georgia is no exception to this general rule.

When the Grading Committee chose Georgia as one of the states in which to make the nursing supply and demand study, there was no way in which to proceed. The members of the medical profession came to the rescue and through their co-operation 1640 nurses of all types were located. To these the first questionnaires were sent.

I desire here to make public acknowledgment and voice appreciation for this service, as well as for the valuable assistance in securing the passage of mandatory legislation governing nursing, during the last legislative ses-

sion of the General Assembly of Georgia.

We now know that all nurses were not reached, for 2260 nurses have renewed their registration or were originally registered since January 1, 1928. Of these, all but 432 are living in Georgia at the present time. (Undoubtedly there are others.)

During a typical week during the spring, there were 90 registered nurses of those who register at the official nurses' registry in Atlanta who had not been employed during the entire week. In Augusta there were 6; in Savannah there were 19, and in Macon 39, who were not employed during that entire week. A total of 154 in the state.

The unemployment of undergraduate nurses during the week was even more acute. It must be borne in mind that the smaller communities are entirely unorganized for distributing nursing service, and doubtless these figures would be far greater if the real situation could be known. The registries in these centers filled every call during the week.

The economic loss from this unorganized, unregulated distribution of nursing service is appalling to the individuals, and to the state as well. If such liabilities could be transformed into assets, might not the costs of sickness be lowered?

This lack of professional regulation of nursing service has given opportunity to commercial registries to flourish, since nurses have turned to them in response to alluring offers and many disappointments have resulted to institutions as well as to nurses.

The American Journal of Nursing published early findings of the Grading Committee, which showed that the average earnings of private duty nurses reporting were such as to make it necessary for them to borrow money in order to live. That they were employed only eight months out of the year and gainfully employed only seven, one month being given to charity service, either to a relative or friend, or uncollectable or purposely donated.

What future has nursing?

Where does the present system lead?

Is it not the responsibility of those agencies and individuals directly connected with the employment and training of nurses to reorganize their methods to include measures that

will insure economic security to them within the economic reach of the patient?

What is wrong with the system?

Let me give you three pictures:

When we secured the names of physicians who would co-operate in the nursing study, from Dr. Bunce, the Secretary-Treasurer of the Medical Association of Georgia, in a certain county in our state one physician who had been practicing in that county for ten years said in response to our request for a list of nurses "There are no qualified or registered nurses in our county. I send to blank when I need a nurse."

A second physician, who had been practicing in the county for twenty years or more, said "We have no registered nurses, but four or five undergraduate and practical nurses. Our people are poor and cannot afford to pay the registered nurses' prices; so I use what I can get."

The third physician who had been practicing there for about thirty years said, "We have four or five good nurses in our county. I never have any trouble getting a good nurse." The fourth physician did not reply. There are now three registered nurses in his county. Time will tell how much good nursing the people of this county can or will pay for.

Another county of 20,000 population with a county seat of 5,000 has three small hospitals. One of these is listed in the Hospital Directory of the American Medical Association as having eight beds and an average of four patients daily. The other two are no larger. Each wants a school of nursing. Are the requests reasonable? One of them secures a year of affiliation, attempts to cover the standard curriculum, secures assistance from the High School and outside sources to enlarge its faculty. The other two are making no such efforts. Why should they not unite and have one hospital and one school?

Competition, lack of harmony and standards foster the desire to duplicate equipment and service. Does this tend to bring down nursing and medical costs to the patient and give the best education to student nurses? A more fundamental problem presents itself than nursing care.

The American Medical Association's Com-

mittee on Nursing recommends that a training school for nurses be conducted only in a general hospital with from 50 to 150 beds. Our state has more than thirty schools of nursing that do not meet this standard.

Then let me quote from a letter from one of your members:

"When I opened this little hospital in Georgia, I endeavored to maintain the same high standards as the hospitals in California and New York, with which I had been associated, and contended for; but after sending home one class after another, I became thoroughly convinced that *those who were capable of meeting my requirements* also saw that they could get more by going to the cities, hence I closed my training school and employ graduate nurses, and when they do not make good, I pay them what I owe them and get others. These applications (for registration) are from the only girls (7) who 'got by' in twelve years!"

The Board of Examiners of Nurses for Georgia is faced with the serious problem of enforcing minimum standards for registration of graduate nurses that shall qualify the nurses of Georgia not only to nurse in the state, but in other states to which they may elect to go. The task would not be so insurmountable if the active support and understanding of the medical profession could be obtained.

Is good nursing as valuable to the patients' welfare as an X-Ray machine or a deep therapy machine, or laboratory equipment? Why should not the character of the nursing be as important in the rating of an institution by the College of Surgeons as the rating of any of the other departments?

Something is radically wrong, and we must get back to a better and mutual understanding between physicians and nurses, and a genuine respect and appreciation for the contribution that nursing—good nursing—may make to the welfare of the patient. This can be done by conferences and committees; by an exchange of ideas in conventions. Is it too much to hope that some day we might have the nurses and doctors of our state convening at the same time, in the same city, and holding certain joint meetings? If we

ever do, many of our problems will begin to be solved.

If young women meet the requirements of the best physicians, they need the best facilities for instruction that can be afforded them, and consequently make every effort to secure them. The small school suffers thereby.

The usual reason given for maintaining the very small school is that it is the only way the hospital can be run. The letter quoted would indicate that it is not.

Do we really know what it costs to educate a nurse? One superintendent says it costs \$2.00 per day per student. Another that it costs \$100.00 per month per student; another that he charges against his income tax returns an allowance of \$75.00 per month for students. But the accounts of these institutions are not kept so as to show these facts. The report of the American Medical Association states that it costs from \$423 to \$1,000 per year per student, according to reports from a large number of schools.

Naturally, the amount is dependent on the kind and amount of instruction being given and the time spent in class and lecture work. The average time of class and lecture work given was estimated at from 10 to 12%, while the hours of service given to the institution ranged from 6300 to 9300.

The average vocational school courses allow one hour of theory to four or five of practice or laboratory work, or from 20% to 25% of theory. Those doctors—and there are many—who think the student nurse is getting too much theory and class and lecture work, should study the curricula of other technical schools.

We may hope soon to know more about the economic side of sickness and its care, for a National Committee has been organized, with Dr. Ray Lyman Wilbur, president of Stanford University, as chairman, to study "The costs of medical care." The Committee is composed of eminent people, including physicians, nurses and others, some of whom are already serving on the Committee on the Grading of Nursing Schools.

Our reason tells us, however, that the cost of educating nurses should not be an additional burden on the sick; that it should not

ASCENDING PARALYSIS

REPORT OF A CASE

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In the year 1859, Landry, a french physician, described a disease under the name of, "Paralysie Ascendante Aigue," characterized by a rapidly ascending symmetrical paralysis, while the sensibilities and functions of the bladder remain normal.

The definition of Fussell is quite clear; "A Progressive Paralysis, due to an infection of some sort, which begins in the legs and gradually extends upward until the muscles of respiration and deglutition are affected, when death ensues."

"The paralysis is flaccid and without pain, beginning in the legs and leading to an almost complete motor paralysis, with diminished or absent reflexes."

The disease begins with fever, increased pulse rate and lassitude, and though the fever may not be high, the disease is of the type of an acute infection.

In the Leube-Salinger Work on Diagnosis, the statement is made that: "A Diagnosis is generally easy and may be made with certainty."

The symptom complex consists of:

Normal condition of sensation.

The paralyzed muscles are flaccid, and there is no wasting, and no alteration in electrical contractility.

There is disappearance of superficial and deep reflexes.

The sphincter control is not impaired.

Bed sores are absent.

The cerebral function is intact.

Recovery has taken place only in rare instances. The patients usually die with paralysis of respiration within a week from the onset.

The infection involves the ganglionic cells of the anterior horns and the peripheral motor neurons.

The morbid anatomy is described by James Collier:

"Slight hyperemia of the spinal cord and especially of the grey matter with a few

punctiform hemorrhages is the only change noticeable upon naked eye examination."

"Very definite histological changes are found upon microscopical examination in the anterior horn cells of Clarke's column, where any degree of change may be found, from an early pericentral chromatolysis, to a complete loss of the chromatin granules and eccentrication of nuclei. The myelin sheaths of the spinal cord often show a diffuse fatty change."

"The cerebrospinal fluid is in excess and clear; in two cases it presented no abnormality either as regards cells or albumen content."

"Enlargement of the spleen and mesenteric glands is not uncommonly found."

The following case seems of unusual interest.

Oct. 10, 1924. Male—age 52. Physician. Complaint: inability to use arms and legs. Family History: Unimportant.

Past history: typhoid fever with a normal convalescence 30 yrs. ago. Cystitis for five or six years. In other respects the past history is not important.

Present illness: On September 15, he went to bed with numbness in the feet and legs. The numbness grew progressively worse, he had some darting pains in his legs and soreness in the feet. Later his arms and hands became numb and his hands became tender to touch. A few days after going to bed, he says he tried to stand and was unable to do so, his knees gave away and his legs would not support his body. His arms and legs became progressively weaker and for some days he was unable to move his legs. On the 14th of October, he began to have some trouble with breathing, mainly a sense of oppression in the chest. During the night of the 15th, he was unable to breathe and artificial respiration was done several times. There was no difficulty with swallowing, or at least, none was complained of. During the 16th, he had less trouble breathing and began to improve.

Formerly his weight was about 140, he had been weighing recently 175. He thinks loss in weight during the illness was extreme but he does not know how much.

Physical Exam: Sthenic habitus. Muscles are flabby and the skin seems loose.

The heart apex is 9 cm. from the mid-sternal line in the 5th space. Heart sounds are of poor quality. The pulse is 124.

The vessel walls are palpable only.

The temperature is normal.

The blood pressure is:—systolic 132, diastolic 92.

The liver dullness extends from the 5th space to about 2 cm. below the costal margin in the nipple line.

The spleen is not palpable.

There is no unusual tenderness elicited by prolonged pressure over the styloid process.

The upper abnormal reflex shows slight reaction while the cremasteric reflex is nil.

The palate and the eye reflex is normal. There is no nystagmus or tremor of the lids, or of the extended tongue.

The upper and the lower deep tendon reflexes are abolished.

The Planter, Oppenheim, Babinski and Clonus are all negative.

The pupils react to light and accommodation.

There is marked loss of muscle power in both arms and legs; he has not strength enough to hold a tumbler in his hands.

The tactile and thermic sense is normal, except that the soles of the feet are tender to touch.

The urine is cloudy and shows a faint trace of albumen and the sediment contains many pus cells.

The hemoglobin is 75 per cent by the Tallquist scale and the white blood cells are 14,000.

The Wasserman reaction is negative. He refused a spinal puncture.

November 8, 1924. (Four weeks later). The patient was up and hobbling about with a cane. There were no changes in the deep reflexes, all were nil. The hand grip was weak and also leg extension against resistance. He was only able to walk about by hanging onto furniture or by using one or two canes. There was hypersensitiveness of the skin below the knees; stroking caused a painful sensation.

One notes that the difficulty with respiration came a month from the onset.

February 1, 1928. (Three years later.) He says that he was able to carry on his work after June of 1925, he was not able to do much at first but after a few months he was able to carry on quite well.

He says, at the present time, he still has a little numbness of the toes and that his legs are weak:—that he has to be careful where he puts his feet or he thinks he might fall, though he has not done so.

Physical Exam: His present weight is 175 pounds. There is visible precordial pulsation. The apex impulse is not felt but on

percussion is 9.5 cm. out in the 5th space. The liver dullness begins in the 5th space. The heart sounds are faint rather than loud, the aortic second sound is greater than the pulmonary second sound. The radial walls are hardly palpable. The blood pressure is systolic 128, diastolic 80. The upper and lower abdominal reflexes are normal. All of the upper deep reflexes are obtained. The knee and achilles jerks are nil; the knee jerk is not obtained on reinforcement.

The gait is normal. The arm and leg coordination is good; there is no tremor.

The muscle power is good and there is no wasting. The Oppenheim, Babinski, Rhombberg and Clonus reflexes are all negative.

There is no disturbance of tactile sensation.

The pupils react well to light and accommodation. The eye grounds are normal, though the discs are a little red.

The urine is cloudy and there is a faint trace of albumen and many pus cells in the sediment.

It is interesting to note that Robert McDowall states that, "It used to be thought that recovery of reflexes was quite impossible but during the World War it was demonstrated, by Head and Riddoch, that cases of complete spinal section were not as hopeless as at first they appeared."

Though the case is not altogether typical of Landry's paralysis, I feel that it cannot be well explained upon any other basis. Whether or not Landry's paralysis is a form of anterior-polyomyelitis, I am not prepared to say. About this, there is much conflicting opinion.

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DIET IN THE TREATMENT OF PERNICIOUS ANEMIA*

REPORT OF TWO CASES WITH SUBACUTE
COMBINED SCLEROSIS

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The problems presented by pernicious anemia have received wide-spread study during the past two years. This increased interest was doubtless stimulated by the work of Drs. Minot and Murphy, who report very favorable results from the use of a special diet in the treatment of such cases. Their first article, published in *The Journal of the American Medical Association*, Volume 87, No. 7, Aug-14, 1926, outlines the diet used and summarizes the results obtained by its use in forty-five cases. The relationship of anemia to vitamin deficiency has been reported, particularly by Drs. Koessler, Maurer and Loughlin¹. Dr. Macht² reports upon the degree of toxicity of the serum from individuals with Pernicious Anemia, upon living plants. He shows that such serum is markedly toxic to seedlings and that the degree of toxicity of a given serum may be used as an aid in differential diagnosis. The detoxifying effect of irradiating pernicious anemia serum in vitro and in vivo with ultra-violet ray is shown, which effect may be increased by the addition of certain sensitizers. The "use of innocuous sensitizers such as tetra-brom-fluorescein or eosin together with ultra-violet ray" is cited as being a promising procedure in the treatment of this disease.

The diet advised by Drs. Minot and Murphy, and as used in the cases reported below, was made as palatable as possible and for each day was practically as follows:

"1. From 120 to 240 Gm. and even sometimes more, of cooked calf's or beef liver. An equal quantity of lamb's kidneys was substituted occasionally.

2. One hundred and twenty grams or more of beef or mutton muscle meat.

3. Not less than 300 Gm. of vegetables containing from 1 to 10 per cent of carbohydrate, especially lettuce and spinach.

4. From 250 to 500 Gm. of fruit, especially peaches, apricots, strawberries, pineapple, oranges and grapefruit.

5. About 40 Gm. of fat derived from butter and cream, allowed in order to make the food attractive. However, animal fats and oils were excluded as far as possible.

6. If desired, an egg and 240 Gm. of milk.

7. In addition to the above mentioned foods, breads, especially dry and crusty, potato and cereals, in order to allow a total intake of between 2,500 and 3,000 calories composed usually of about 340 Gm. of carbohydrate, 135 Gm. of protein, and not more than 70 Gm. of fat. Grossly sweet foods were not given, but sugar was allowed very sparingly."

Though our opportunity for the study of such cases has been limited, we have used a diet based upon the principles of Minot and Murphy with striking results, both in pernicious anemia and Banti's Disease. In the latter condition a high red blood count was maintained and the marked splenic enlargement subsided, relieving the discomfort caused by increased intra-abdominal pressure.

Complete clinical data in two cases of pernicious anemia associated with subacute combined sclerosis treated with the Minot-Murphy diet and dilute hydrochloric acid follow:

CASE 1—No. 8580. White male; age 37; stretcher case; admitted to hospital August 29, 1927, for observation.

Family History. Irrelevant as far as could be determined.

Personal History. Born in Americus, Ga., 1890; ninth of 14 children; early childhood uneventful; entered school at age 10, finished 3rd grade, having regularly advanced; stopped school to work on farm; measles at 10; mumps in 1917; entered service July, 1918, at Camp Gordon. While in service hospitalized 20 days in Field Hospital No. 26 for influenza, and 2 months in Base Hospital No. 53 for influenza and bronchitis, also suppurative otitis media with residual partial deafness.

Clinical Course Prior to Present Hospitalization. In 1920 patient "got pretty feeble with stomach trouble, got pale and weak, feet got sore and had to give up work for about a

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month." He states that he has never regained his former state of health since that attack. In 1922, he had a recurrence of weakness and was in poor health for several weeks, gradually improving so that he was able to work on the farm. Admitted to hospital January 18, 1926, with the following complaints: "General weakness and run-down condition; gets short of breath, coughs and vomits, if over-exercised. Painful cracking of joints; painful burning of feet." During the first few weeks of his stay in the hospital he is reported as having been toxic, drowsy and somewhat edematous; rales were present throughout entire chest and temperature ran a septic course. Single blood count during hospitalization reported as follows:

| RBC Millions | Hemog. | C. I. | WBC Thous. | P. M. | S. M. | L. M. | Trans. | Baso. |
|-----------------|--------|-------|---------------|-------|-------|-------|--------|-------|
| 4.5 | 95% | 1+ | 14.6 | 73% | 24% | 1% | 1% | 1% |

Patient was discharged as having reached maximum hospital benefits—improved, April 30, 1926. He was able to carry on in farm work for a few months following discharge from hospital, but "feet became numb, got weak and heart would beat fast and skip beats, so had to stop working." Condition gradually grew worse, had burning sensation in chest, tingling of feet and legs and finally could scarcely walk at all on account of weakness and shortness of breath.

Present Hospitalization. Upon admission to hospital August 29, 1927, patient was found to have temperature of 39.2 degrees Centigrade, to be irrational, confused and drowsy. He was emaciated—weight 115 pounds—markedly anemic and had dependent edema; cardiac murmurs suggestive of mitral lesions were heard. Slight impairment of tactile sensation in right leg present.

Patient remained confused and stuporous; his temperature ranged about 39.2 degrees Centigrade; his heart action was rapid and irregular. On September 3rd his blood count was as follows:

| RBC Millions | Hemog. (Dare) | C. I. | WBC Thous. | P. N. | Lymph. | Nuc. Reds | Poikilocytes |
|-----------------|------------------|-------|---------------|-------|--------|-----------|--------------|
| 1.15 | 10% | 0.54 | 3.2 | 44% | 56% | Num. | Num. |

Blood typing—group two—Moss classification.

Blood transfusion was thought imperative on account of deepening stupor; 500 C C of citrated blood were given following which he had a slight reaction.

Following transfusion patient gradually improved and on September 6th blood findings were:

| RBC Millions | Hemog. (Dare) | Color Index | WBC |
|-----------------|------------------|-------------|------|
| 1.44 | 27% | 1.— | 2800 |

Patient was rational, co-operative and stated that he was feeling much improved. At this time the Minot-Murphy diet was begun which patient took very well; improvement continued at increased rate as is indicated by the following laboratory reports and physical examination at time of discharge from hospital:

| Date 1927 | RBC Millions | Hemog. (Dare) | Color Index | WBC Thous. | Nucleated Reds | Folk. |
|--------------|-----------------|------------------|----------------|---------------|-------------------|---------|
| 9-23 | 3.2 | 52% | 0.8 | 5 | None | Several |
| 11-21 | 4.58 | 91% | 1. | 7 | None | Several |

Gastric Analyses:

| Date 1927 | Meal (Ewald) | Total Acidity | Free HCL |
|--------------|--------------|---------------|----------|
| 9-30 | " | 8 degrees | None |
| 11-22 | " | 5 degrees | None |

Blood Wasserman: Negative. Sputum: Negative for Tubercle Bacilli. Feces: Negative for ova and parasites. Urine: Negative.

Physical Examination, Feb. 15, 1928: General Appearance—Height: 64 in. Weight: 152 lbs. Head: Normal in contour; hair-scenty. E. E. N. T.: internal strabismus, left; ambiopia exanopsia, left; hyperopia. Otitis media, purulent, chronic residual, bilateral. Dental: several teeth had been previously removed, those remaining were found to be loose and marked pyorrhœa was present. All teeth were extracted. Artificial dentures furnished. Neck: no abnormal pulsations. Thyroid not palpable. Chest: symmetrical, barrel-shaped. Percussion note and breath sounds normal. Heart: relative cardiac dullness extends 11 CM to left of mid-sternal line in 4th interspace; no shocks or thrills. Action regular and forceful. Soft blowing systolic bruit at apex, (transmitted to left axilla.) Sounds are muffled at base. Blood pressure: systolic 120—diastolic 74. Abdomen: no masses or tenderness. Liver, kidneys and spleen not palpable. Genitalia: Small, hard nodule present on right epididymus. Varicocele small, bilateral. Extremities: Negative. Neurological:

cranial nerves negative. Pupils, equal, regular and react to light and accommodation. No atrophies or paralyses. Cutaneous sensibility intact. Biceps, triceps, abdominal, cremasteric and Achilles reflexes present. Patellar reflexes sluggish. Slight impairment of vibratory sense in right lower extremity. No clonus, Babinski and Rhomberg. Gait awkward. No distinct ataxia present.

CASE 2—No. 8327. White male; age 38; stretcher case, attended by parents. Admitted to hospital March 12, 1927, for treatment of pernicious anemia.

Family History. Father living and well at 66 years. Mother living and in fair health at 59 years; has had indigestion and gall bladder trouble for several years. Was hospitalized in 1907 for examination, at which time absence of free hydrochloric acid from stomach content was noted, and diluted hydrochloric acid prescribed, which he has taken in doses of 30 minims before meals at intervals since. Blood count on mother made Oct. 15, 1927, after she had taken dilute hydrochloric acid and some liver during Summer, follows:

| RBC Millions | Hemog. (Dare) | C. I. | WBC Thous. | Nucleated Reds | Polkilo- cytes |
|-----------------|------------------|-------|---------------|-------------------|-------------------|
| 3.85 | 62% | 0.8 | 4.8 | None | None |

Brothers: One living and well at age of 33. Two dead in infancy, causes unknown. Sisters: Three dead, one of typhoid at age 17, one of appendicitis, one in infancy of whooping cough. Grandparents died at advanced ages. Causes unknown.

Personal History. Born in South Carolina, November 18, 1889; second child. Very delicate during first three years; measles at 12 years. Began school at age of 9. Finished high school and college. Attended University, studying law 3 years. Had to give up study of law to assist father in his business. Remained as supervisor of father's plantation until entering service. Entered service June 15, 1918. While drilling could not walk without watching path.

Present Illness. After discharge from the army gradually became weaker and walking became more difficult, so that in October, 1924, had to give up work. "At this time red blood count was below 2,000,000." Had difficulty in fixing attention and in retaining matter read. Received treatment from private physicians for malaria and anemia, without much benefit. On January 29, 1927, was admitted to U. S. Veterans' Bureau Diagnostic Center, Washington, D. C., for observation, where he

remained until March 11, 1927, diagnoses being made as follows:

- (1) Pernicious anemia.
- (2) Combined sclerosis of cord.
- (3) Hemorrhoids, mixed.
- (4) Vitreous opacities.
- (5) Dental caries.
- (6) Pyorrhœa, severe.

Gastric analysis could not be done as patient would not co-operate. Blood findings before the institution of treatment were as follows:

| Date 1927 | RBC Millions | Hemog. (Dare) | Color Index | WBC Thous. | Poly. Neu. | Lym. | Large Monon. | Eos. | Basop. | Polkilo. |
|--------------|-----------------|------------------|----------------|---------------|---------------|-------|-----------------|------|--------|----------|
| 1-31 | 2.48 | 52% | 1. | 8. | 55.5% | 36% | 1.5% | 6.5% | 0.5% | |
| 2-7 | 2.60 | 68% | 1.3 | 6.6 | 60% | 35% | 0.3% | 4.6% | | Many |
| 2-25 | 3.10 | 57% | 0.92 | 6.1 | 59% | 35.3% | | | 5.6% | |

Present Hospitalization. Upon admission to hospital March 12, 1927, patient was emaciated—weight 114 lbs.—skin and mucous membranes were of good color. Tongue was red. Teeth in poor condition. Neurological: cranial nerves negative. Pupils equal, regular; react to light and accommodation. Consensual and ciliospinal reflexes present. Some atrophy of left leg, affecting calf muscles. Weakness of muscles of right lower extremities, without apparent atrophy. Cutaneous sensibility to touch diminished in right calf and over buttocks. Vibratory sense also impaired in lower half right leg. Abdominal reflexes absent. Cremasteric reflexes present. Plantar stimulation causes dorsi-flexion of great toe on right—plantar flexion on left. Biceps, triceps, patellar and Achilles reflexes hyperactive. No clonus; standing alone impossible. Gait when supported on either side, flapper in type.

Pumping of stomach after Ewald test breakfast March 19, 1927, yielded insufficient fluid to make quantitative determinations, though there was a complete absence of free hydrochloric acid.

Treatment with the Minot-Murphy diet, in conjunction with which dilute hydrochloric acid, drams-1, T.I.D., before meals, was given. This treatment was begun March 16, with the following changes in the blood:

| Date 1927 | RBC Millions | Hemog. (Dare) | Color Index | Leucocytes Thousands | |
|--------------------------------------|-----------------|------------------|----------------|-------------------------|-------------------|
| 3-12 | 2. | 55% | 1.3 | 4. | |
| 3-14 | 2.7 | 55% | 1. | 5.5 | |
| 3-30 | 3.54 | 75% | 1. | 6.5 | |
| 4-8 | 3.7 | 80% | 1. | 9.7 | |
| 4-23 | 4.2 | 95% | 1.16 | 8.3 | |
| 5-5 | 4.9 | 102% | 1. | 8.2 | |
| 5-25 | 5.02 | 96% | 0.9 | 7.2 | |
| 6-4 | 4.98 | 95% | 0.9 | 6.5 | |
| 6-27 | 5.30 | 95% | 0.9 | 7.5 | |
| 6-30 | 5.29 | 80% | 0.8 | 8.2 | |
| Differential count on June 30, 1927: | | | | | |
| Poly. Neuc. | Lymph. | Trans. | Eosin. | Neuc. Reds | Poikilo- cytes |
| 52% | 42% | 1% | 5% | Several | Numerous |

Patient was discharged from the hospital July 2, 1927, that he might spend the Summer in the mountains of North Carolina, with instructions that he continue taking the hydrochloric acid and the special diet. He was re-admitted to the hospital October 7, 1927, at which time his general condition was considered improved, though his neurological symptoms were little changed.

Laboratory determinations since re-admission are as follows:

| Date 1927 | RBC Millions | Hemog. (Dare) | Color Index | Leucocytes Thousands |
|--------------|-----------------|------------------|----------------|-------------------------|
| 10-15 | 4.8 | | | |
| 10-27 | 4.2 | 87% | 1 | 8.5 |

(During this time abscessed teeth were being extracted.)

| Date 1927 | RBC | Hemog. | Color Index | Leucocytes |
|--------------|-----|--------|----------------|------------|
| 11-16 | 5.3 | 89% | 0.9 | 8.0 |

Gastric analysis November 22, 1927, Ewald breakfast. Total acidity: 8 degrees. Free Hydrochloric acid: None. Blood Wassermann: negative. Feces: negative for ova and parasites. Urine: negative.

Physical Examination, March 14, 1928, (time of discharge from hospital): Summary—Height, 66 in. Weight, 141 lbs. Head: normal in contour: hair scanty. E. E. N. T.: Deviated nasal septum and hyperopia present, suitable glasses worn. Neck: No abnormal

pulsations. Thyroid and post cervical glands not palpable. Chest: symmetrical. Expansion free and equal; percussion note and breath sounds within normal limits; no rales. Heart: no shocks or thrills. Relative cardiac dullness extends 10½ CM to left of mid-sternal line. Retro-manubrial dullness not increased. Action regular and forceful. No murmurs. Blood Pressure—Systolic 120; diastolic 90. Abdomen: walls soft. No abnormal masses. Liver, kidneys and spleen not palpable. Genitalia: foreskin adherent to corona. Extremities: negative. Neurological examination: cranial nerves negative. Pupils equal, regular and react to light and accommodation. Muscular power diminished. No localized atrophies or paralyses. Cutaneous sensibility to tactile stimuli diminished about toes. Muscle and joint sense impaired. Vibratory sense diminished in right leg. Biceps and triceps reflexes active. Abdominal and cremasteric reflexes sluggish. Patellar and Achilles reflexes hyperactive. Babinski sign present bilaterally, more marked on right. No clonus, slight ataxia of all extremities. Finger-nose and finger-finger tests poorly performed. Gait spastic, base broadened, walking possible without assistance or aid of walking cane. Station unsteady.

COMMENT AND CONCLUSIONS

A survey of the data presented above reveals that, in each of the cases reported, the disease was insidious in its onset, and its nature was not recognized until after several remissions and relapses had occurred.

These patients had received considerable symptomatic treatment prior to the institution of the Minot-Murphy diet, without marked or lasting benefit.

Extensive dental caries and pyorrhœa were present in each case.

Complete absence of free hydrochloric acid persisted and practically the same degree of total acidity was present in the gastric content of each.

The anemia was severe at the time of admission, and responded readily to the use of the special diet which was given in conjunction with dilute hydrochloric acid by mouth.

In Case 1 the subjective symptoms indicative of nervous system involvement were practically relieved with little evidence of organic neurologic pathology remaining. In Case 2 the nervous system was extensively involved on account of which patient was bedridden; in this, improvement has been effected to the

extent that the patient can walk well with little assistance, though he still has outstanding evidences of neurologic involvement.

Extension of the pathologic process in the nervous system has not occurred in either case.

The Minot-Murphy dietetic treatment of pernicious anemia may be carried on under the direction of a physician, without prolonged periods of hospitalization, except in those cases where the extensiveness of the neurologic involvement renders hospital care necessary.

The cases reported in this paper are too few and have been under treatment too brief a period to warrant the drawing of final conclusions. However, if we may judge from the results thus far obtained in them, we may fairly say that these patients have every reason to expect that same favorable outcome as has been reported (3) for the majority in which the Minot-Murphy treatment has been used; that a state of remission has been established in them, both as regards the blood and neurologic changes, and further extension of the pathologic processes will be negligible so long as above mentioned dietetic regimen is adhered to.

REFERENCES

- (1) Koessler, K. K.; Maurer, Siegfried; and Loughlin, Rosemary; The Relation of Anemia, Primary and Secondary, to Vitamin A Deficiency, *J. A. M. A.* 87; 476, Aug. 14, 1926.
- (2) Macht, D. I.; Pernicious Anemia; An Experimental Contribution to the Etiology, Diagnosis and Treatment, *J. A. M. A.* 89; 753, Sept. 3, 1927.
- (3) Minot, G. R., and Murphy, W. P.; A Diet Rich in Liver in the Treatment of Pernicious Anemia, *J. A. M. A.* 89; 759, (Sept. 3, 1927).

WRITING DEATH CERTIFICATE

Harold B. Wood, Harrisburg, Pa., (*Journal A. M. A.*, May 12, 1928), says that many defects appearing on death certificates would be readily corrected by a better understanding by physicians as to the requirements and uses of these records. The death certificate, next to the birth certificate, is the most important official record made of man. It is of the greatest importance, therefore, that this record be made accurate and complete. In the matter of inheritance and other legal matters, the family of the deceased deserve protection by a correct certificate. A misunderstanding by physicians with regard to the requirements of death certificates yields errors

THE DIAGNOSIS OF EARLY PULMONARY TUBERCULOSIS*

REPORT OF A CASE

MARK S. DOUGHERTY, M.D.

Atlanta

Through time immemorial tuberculosis has been the arch enemy of mankind. As far back as there are written records of the progress of civilization there are references to the ravages of this deadly malady. Many of the illustrious members of our own profession have fallen victims in its clutches. John Keats, who was a medical graduate but who forsook the healing art to follow the muse, fell before its steady progress. Laennec, who is the father of our present day knowledge of the pathology and physical diagnosis of tuberculosis, died from the disease. Trudeau, who founded the sanatorium at Saranac Lake, New York, did the work of his life while waging an inspiring heroic battle against tuberculosis. In 1904 there were 201 deaths from tuberculosis per 100,000 people in the registration area of the United States. At this time the National Tuberculosis Association was formed. In 1924 the United States public health report¹ showed that the death rate from tuberculosis was 90.6 per 100,000 people in the registration area. In 1904 tuberculosis was enthroned in the first place as the cause of death in this country, a place that it had maintained through the ages. In 1924 it was listed as fifth² as the cause of death having been superseded by heart disease, pneumonia, cerebral hemorrhage and softening, cancer and other malignant tumors. In the state of Georgia between the years of 1922 and 1927, inclusive, there was a drop in the death rate from tuberculosis of from 89.9 to 70.6, a decrease of 19.4 per cent in six years. In Cherokee County there were ten deaths per year in 1922, 1923 and 1924, thirteen deaths in 1925 and nine deaths in 1926 from tuberculosis, a decrease of from 52.5 to 45.4 deaths per 100,000 people, the population of Cherokee County being estimated at 20,041 by the census bureau.³

*Read before the Cherokee County Medical Society, Canton, Ga., April 18, 1928.

Volumes have been written on the diagnosis of pulmonary tuberculosis. From this vast amount of work certain accepted diagnostic standards have been evolved. The present accepted diagnostic standards were advanced by Drs. Fred H. Heise and Lawrason Brown from the Trudeau Foundation at Saranac Lake, New York in the February number of the American Review of Tuberculosis in 1923.⁴ These were afterwards accepted and adopted by the National Tuberculosis Association, and consist of:

1. A history of hemoptysis of a drachm or more without apparent cause.
2. A history of pleurisy with effusion which is not explained otherwise.
3. The persistence of coarse or moderately coarse rales in the upper third of the lung.
4. The demonstration of mottling and beading in the parenchyma of the upper third of the lung by the roentgen-ray film.
5. The presence of tubercle bacilli in the sputum.

The presence of tubercle bacilli in the sputum is, of course, positive proof of the disease. With the presence of a combination of any two of the remaining criteria a positive diagnosis of pulmonary tuberculosis is justified. With the presence of any one of the criteria the presence of tuberculosis can not be ruled out.

As I see it the diagnosis of early pulmonary tuberculosis can best be effected through the medium of three methods of precision in diagnosis. First: an accurate and detailed history; second: a careful physical examination; third: laboratory work that is done properly and interpreted correctly.

HISTORY

The taking of a history of a case so that the facts in the history are presented in chronological order and relative importance is as much an art in the practice of medicine as performing a skillful operation or administering a timely remedy. The taking of a careful history entails more work but it will richly repay all those who do it, for an appreciable per cent of cases can be diagnosed in this way.

Family History. The present state of health of the members of a family should be ascertained. The possible history of tuberculosis

in the family should be investigated carefully. The important point in this being the history of intimate contact with the disease.

Past Medical History. The previous diseases that the subject has had should be gone into very carefully. Familiarity with the patient and his past history does not preclude the possibility of repeated exposure to tuberculous infection. It is important to note repeated pulmonary infections such as: influenza, bronchitis and pneumonia.

History of Present Illness. This should be one of the great supports of the clinician in making the diagnosis of any disease. *It is of paramount importance in making the diagnosis of early pulmonary tuberculosis.*

1. Mode of onset. Pulmonary tuberculosis presents no distinctive mode of onset. Sir William Osler in his advice to the young internist said "know syphilis in all of its manifestations and all other things clinical will be added unto you." Tuberculosis might well be included in this statement. In the book on Diseases of the Chest and Principles of Physical Diagnosis by Drs. Norris and Landis the onset of pulmonary tuberculosis is graphically portrayed.⁶ The danger signal may present itself in the form of a single symptom such as hemoptysis, pleurisy, hoarseness, ischiorectal abscess and fistula in ano. However, far more often the disease presents an insidious onset with cough, slight fever, malaise, loss of weight and strength, anemia, anorexia and indigestion.

2. Symptomatology. The symptomatology of pulmonary tuberculosis may be divided into localizing and constitutional symptoms.

Localizing Symptoms.

1. Cough and expectoration may be the earliest manifestations of pulmonary tuberculosis. However, they are present in practically all pulmonary diseases and are of little value in diagnosing tuberculosis unless persisting with no other explanation for a period of six weeks or longer.

2. Pain in the chest is a common complaint among tuberculous patients. At the Phipps Institute in Philadelphia it was noted in 2280 cases out of 3007 or 75.8 per cent.

3. Hoarseness is sometimes the presenting symptom in pulmonary tuberculosis and

should demand careful examination of the chest.

4-5. Hemoptysis of a drachm or more and pleurisy with effusion are the localizing symptoms of paramount importance. The presence of either of these symptoms unexplained in a history should rivet the attention on pulmonary tuberculosis and demand careful examination and long continued observation.

Constitutional Symptoms. The constitutional symptoms manifested in pulmonary tuberculosis are of greatest significance in diagnosing activity. In the March 31st number of the Journal of the American Medical Association of 1928, Dr Lawrason Brown states "in the diagnosis of the disease the localizing symptoms far outweigh the general symptoms, but in the diagnosis of activity of the disease the general symptoms are vastly more significant."⁶

I propose to discuss only those general or constitutional symptoms which are of paramount significance in determining activity.

1. Fever is one of the earliest manifestations of the disease and is the most important constitutional symptom. It is generally recognized that an unexplained temperature of above 99° in the male and 99.6° in the female present on four out of seven days denotes activity in pulmonary tuberculosis. Dr. A. M. Dimmock in the March number of the Journal of the Medical Association of Georgia warns us that not all cases of active pulmonary tuberculosis show a temperature.⁷

2. Pulse rate and blood pressure. Acceleration of the pulse rate is one of the earliest signs of pulmonary tuberculosis. A rate of 90 or more in the male and 96 or more in the female, associated with a daily temperature, is ample evidence to establish activity in pulmonary tuberculosis. A temperature and pulse record for periods of one week should be kept at intervals on all suspected cases of tuberculosis. The blood pressure in tuberculosis is usually low.

3. Night sweats may occur at any time in the course of the disease but are usually encountered in advanced cases of chronic pulmonary tuberculosis or in acute cases of the disease.

4. Loss of weight and strength are characteristic of the disease and in many cases are

among the first symptoms. They are of most value in indicating activity of the disease.

5. Gastrointestinal symptoms such as sour stomach, heartburn, gaseous eructations and distention following meals, and constipation are often troublesome symptoms. An appreciable percentage of patients will come to you complaining of stomach trouble and on examination you will find pulmonary tuberculosis. Dr. David Perla, in the American Review of Tuberculosis for April of 1926,⁸ reports the analysis of the gastric contents of 198 patients and concludes that pulmonary tuberculosis is often accompanied by a decrease of free hydrochloric acid and he advises large doses of dilute hydrochloric acid for the relief of troublesome symptoms of indigestion.

PHYSICAL EXAMINATION

Dr. Lawrason Brown states that "if the relative value in diagnosis of the various early abnormal physical signs is considered, one is forced to the conclusion that there is no unanimity in regard to value of the data obtained by the practice of inspection, palpation and percussion." However, I feel that the observation of limited expansion on forced breathing in the upper third of the chest is worthy of note. On percussion the demonstration of retraction of the apices is of value in diagnosis. It is generally recognized that auscultation gives the most important information of all the methods of physical diagnosis. Granular breathing was thought by Dr. Minor to be sufficient evidence to justify the diagnosis of pulmonary tuberculosis. This type of breathing is described as a rough or sputtering type of breathing that suggests the co-existence of rales.

The rale is recognized as the most characteristic abnormal physical sign in tuberculosis. The presence of coarse or moderately coarse rales in the upper third of the lung on two or more examinations and not otherwise explained is presumptive evidence of tuberculosis. The detection of rales is not so much dependent on acuity of hearing as it is on the knowledge of how to produce them. The accepted method of producing these rales is to have the patient to cough at the end of expiration and take a quick but not to full inspiration. The rales are usually produced

during the inspiration following the cough. It is better to show your patient what you want him to do than to explain it to him.

Involvement of the apices may be considered tuberculous till proved otherwise.

LABORATORY

1. The presence of tubercle bacilli in the sputum establishes the diagnosis of tuberculosis. It can not be too strongly emphasized that repeated sputum examinations should be made before attaching any importance to a negative report.

2. The inoculation of guinea pigs with the sputum and the recovery of the tubercle bacillus from the guinea pig is corroborative evidence of tuberculosis.

3. The intracutaneous or subcutaneous inoculation of ten milligrams of old tuberculin may produce a local reaction at the sight of inoculation and a general reaction as chilliness, headache, fever, muscular pains and sometimes an increase in cough and sputum. These general symptoms generally follow the subcutaneous injection of tuberculin in from three to six hours.

4. The X-ray has gradually assumed a role of first importance in the diagnosis of early tuberculosis. Mottling and beading diffusely scattered in the parenchyma of the upper third of the lung are minimal standards in X-ray diagnosis. Stereoscopic films should always be made and should be taken repeatedly till clear and detailed films are produced. The X-ray is a valuable means of checking the progress that a patient is making and roentgenograms should be made at intervals on all tuberculosis patients.

SUMMARY

The minimal standards for the diagnosis of early tuberculosis may be summarized as follows:

1. One or more of the following diagnostic criteria should be present: the presence in the history of hemoptysis of a drachm or more, the presence in the history of pleurisy with effusion, the persistence in the upper third of the lung of moderately coarse rales, the demonstration of parenchymal changes in the upper third of the lung by roentgen-ray

film, the presence of tubercle bacilli in the sputum.

2. An accurate and detailed history including:

(a) A history of intimate or long continued contact with the disease.

(b) The mode of onset of the disease.

(c) The localizing and constitutional symptoms.

3. The localizing symptoms are of importance in diagnosing the disease while the constitutional symptoms are indications of activity.

4. Diminished expansion in the upper third of the chest, retraction of the apices, granular breathing and the persistence of moderately coarse rales in the upper third of the lung are the most significant physical abnormalities. The persistence of moderately coarse rales is generally accepted as the paramount abnormal physical sign.

5. Suspected cases of early pulmonary tuberculosis should be kept under constant and careful observation for weeks, temperature and pulse records being kept and repeated checks being made with the X-ray.

6. Moral courage is essential in diagnosing early pulmonary tuberculosis.

TREATMENT

The treatment of tuberculosis is not in the scope of this paper. However, I will allude to the essential points:

1. Rest—prolonged rest—absolute rest in bed for a period of from six months to two years is the essential factor in effecting a cure in tuberculosis. In treating tuberculosis of the bones the orthopedist does not think of removing the cast for a year, neither should the practitioner think of letting a patient up as soon as the temperature has returned to normal.

2. A high calorie diet should be given. A gain in weight is usually considered to be beneficial to these patients.

3. Fresh air and sunshine are essential and can be obtained on a sun porch or by placing the patient in the most favorable place in the house to obtain this result. The patient should be protected from exposure.

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA
Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

JUNE, 1928

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Articles are accepted for publication on condition that they are contributed solely to this Journal.

Manuscripts should be typewritten, double-spaced, and the original (not the carbon copy) submitted. Used manuscript is not returned unless requested.

Communications and items of general interest to the profession are invited from all parts of the State. We especially invite county society secretaries to send us information of happenings in the county that would be of interest to the members throughout the State.

Reprints should be ordered within 30 days after the appearance of an article, since all type will be destroyed at the end of that time.

Editorial Department

PACKAGE LIBRARY SERVICE

We are pleased to announce that arrangements have been made with the A. W. Calhoun Medical Library, Emory University, Georgia, for library service for all members of the Medical Association of Georgia. When any member of the Association wants to study a subject for the purpose of preparing a paper, or merely for the purpose of learning more about it, he will now be able to secure a package containing the latest investigations and studies on the subject by merely writing either the Secretary-Treasurer of the Association or Miss Myrtle Tye, Librarian of the A. W. Calhoun Medical Library, Emory University, Georgia, and enclosing twenty-five cents to cover the cost of packing and mailing. We have been collecting and classifying material for this purpose for some time and valuable packages on many subjects are already available for our members. The Secretary-Treasurer has obligated himself personally to see to it that all packages are returned

intact. We believe this is the greatest step forward which has been made within recent years to assist the members of our Association in keeping well informed on all current medical literature. Let us make use of this valuable service so as to improve our medical knowledge and, at the same time, the character of papers read before county and district societies and the state associations.

CHATTAHOOCHIEE VALLEY MEDICAL AND SURGICAL ASSOCIATION

The twenty-eighth annual session of the Chattahoochee Valley Medical and Surgical Association will be held at Warm Springs, Georgia, July 10 and 11, 1928. All members of the Medical Association of Georgia are cordially invited to be present. The Program Committee has arranged an excellent scientific program. We are informed that the largest attendance in the history of the association is expected to be present. The officers of the association are:

M. T. Benson, M.D., Atlanta, President.

B. T. Wise, M.D., Plains, First Vice-Pres.

W. W. Wilkerson, M.D., Montgomery, Second Vice-President.

W. J. Love, M.D., Opelika, Secretary and Treasurer.

ATLANTA ASSEMBLY

INTER-STATE POST-GRADUATE MEDICAL ASSOCIATION OF NORTH AMERICA

We have just received a copy of the preliminary program of the Atlanta Assembly of the Inter-State Post-Graduate Medical Association of North America which will be held in Atlanta, October 15th through 19th, 1928. We can say without exaggeration that it is the most wonderful scientific program that we have ever seen of any medical meeting. The clinics will begin promptly at seven o'clock on Monday morning and will extend through Friday afternoon. On Friday night a banquet will be held at the Biltmore Hotel.

Symposiums will be held on the following subjects: Gastro-intestinal disease, malignant diseases, diseases of the genito-urinary tract, gynecology, diseases of the respiratory system, diseases of the gall-bladder and liver, diseases of the brain and central nervous system, and diseases of the heart and circulatory

system. These will be conducted and participated in by the leading physicians and surgeons of the world. A mere list of the names suggests the title of "Who's Who" in medicine. for complete information write Dr. Marion T. Benson, General Chairman, Executive Committee, Medical Arts Building, Atlanta.

EMORY UNIVERSITY SCHOOL OF MEDICINE

SUMMER CLINICS

In the coming summer the Medical Faculty will again offer two weeks of clinics to graduates and undergraduates in Medicine. The time will be from Monday, July 9th, thru Saturday, July 21st.

Clinics: Six hours daily, 9-12 A.M.—1-4 P.M. These clinics will cover all branches of medicine and surgery, the specialties being presented with reference to their general medical significance. No fee will be charged. For further information address, Russell H. Oppenheimer, M.D., Dean, 50 Armstrong Street, Atlanta, Georgia.

MINNEAPOLIS SESSION OF THE AMERICAN MEDICAL ASSOCIATION

The seventy-ninth annual session of the American Medical Association was held in Minneapolis, Minnesota, June 11th through 15th. The total registration of physicians was 4,802. Of these there were twenty-seven from Georgia. We think this a very good showing for our association when we consider the distance from Atlanta to Minneapolis.

Georgia was signally honored at the 1927 session by having Dr. James E. Paullin, Jr., elected Chairman of the Section on the Practice of Medicine over which he presided at the Minneapolis session. This is the largest section of the A. M. A. and it was particularly well attended this year. Dr. Paullin's address as Chairman of the Section was on: "The Importance of a Lectureship Fund for the Medical Section." His address was well received and a considerable sum has already been raised by the Section for the establishment of this lectureship fund.

The House of Delegates which transacts all of the business of the Association and elects all of its general officers and trustees was called to order promptly at ten o'clock on Monday morning. The delegates from Georgia, Drs. E. C. Thrash, C. W. Roberts, and Allen H. Bunce were on hand at the opening and all three attended every meeting of the House of Delegates. We were highly gratified to have one of our delegates, Dr. E. C. Thrash, made Chairman of the Reference Committee on Constitution and By-Laws which is one of the most important reference committees of the Association. This committee considered all amendments to the Constitution and By-Laws and promptly reported its recommendations to the House which were unanimously adopted with thanks from the Speaker for its efficient work. Your Secretary-Treasurer was again re-elected Vice-Speaker.

The Section on Diseases of Children elected as its chairman for next year Dr. W. A. Mulherin of Augusta. This, together with Dr. Mulherin's recent election to membership in the American Pediatric Society, gives the highest recognition that can be conferred upon any physician in the field of American pediatrics. Georgia has already given Dr. Mulherin its highest honor by making him President of our Association for 1927-1928.

Dr. W. S. Thayer of Baltimore, who was elected President-Elect at the Washington session last year, was installed as President.

The next annual session will be held in Portland, Oregon, during 1929.

The following officers were elected for 1928-1929:

President-Elect—M. L. Harris, Chicago, Ill.

Vice-President—W. A. Jones, Minneapolis, Minn.

Secretary—Olin West, Chicago, Ill.

Treasurer—Austin A. Hayden, Chicago, Ill.

Speaker of the House of Delegates—Fredrick C. Warnshuis, Grand Rapids, Mich.

Vice-Speaker of the House of Delegates—Allen H. Bunce, Atlanta, Ga.

Board of Trustees—Term expires 1933:

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Georgia State Nurses' Association

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GROUP NURSING

A number of hospitals in this country have been experimenting with group nursing—a scheme being tried out in the effort to give a maximum amount of efficient nursing service for a minimum charge, where patients need more attention than the floor nurses are able to give them, and yet who are unable to pay for a special nurse.

The plan is to form nursing units to consist of a certain number of beds. Nurses, day and night, employed by the hospital and under the direction of the floor supervisor and director of nurses, subject to rules and regulations of the hospital, are in attendance.

Customarily, nurses are on duty from seven to seven, with hours off for recreation in addition to time for meals, special time off on Sundays, etc. The nurses rotate their service, relieving each other of night duty. A "float-er" is included in the personnel of the unit, and the night "float-er" relieves the night nurse.

It goes without saying that nurses in such a unit must be co-operative and congenial, as well as efficient; they must have, also, the co-operation of the supervisor. In short, they should be selected carefully for this service, and then given all possible support.

This type of nursing service is usually carefully explained to the patient, and much praise for it has been given by patients who have experienced it.

Hospital staffs have responded favorably toward the system in most instances. Surgeons and members of medical staffs have expressed themselves to the effect that this is a progressive move, though, of course, still in the experimental stage more or less; that it is capable of furnishing all the necessary care

for an average patient. By and large they seem to feel that group nursing is not suited to some types of very sick people, and that patients exacting more nursing service than it is possible to give them under this plan should not be kept on group nursing.

Where patients hesitate about going to a hospital because of the dread of expense involved, group nursing offers an unusual opportunity.

Summing up, it is felt to be an additional offering of efficient service to the sick at a nominal charge, and should fill the needs of many classes of people who require more than hall nursing, yet who cannot afford a special night and day nurse. It is particularly adaptable to the small private institution.

From an economic standpoint, it should be of great value, for it encourages and assists people to stay within their means while affording them a high type of nursing service. Dr. Arthur N. Collins, M.D., F.A.C.S., says, "It is merely another department of nursing to develop and encourage."

NURSES ENJOY GROUP NURSING

Nurses who have had experience with group nursing find many pleasures connected with it, though admit there are some phases of it they do not like so well. Some of the favorable points brought out are (1) it is more interesting; (2) more educational; (3) it affords regularity and steady employment; (4) regular time off duty; (5) nurses become more attached to the hospital; (6) nurses are employed and paid by the hospital; (7) a keen appreciation of patients.

"Instead of caring for just one type of case, we have as many as six at a time; we have full responsibility of care and treatment of these patients; lasting impressions are made on our minds. We become better acquainted

with a greater number of doctors, learning methods and orders peculiar to each. Regular and steady employment is very beneficial. We can budget our affairs accordingly," says Miss Alice Hopland, R.N., St. Luke's Hospital, Duluth, Minn., in her paper before the Nursing Section of the American Hospital Association, last October. Miss Hopland included some of the difficulties as well as the good points of group nursing. Some of these weak points, as she terms them, which probably can be strengthened, are: (1) Room arrangement; (2) confusion of transfers of patients; (3) rather confining, when there are too many patients to a group; (4) the necessity of keeping groups separate where more than one group is organized in a hospital.

These would appear all to be more or less minor matters, capable of adjustment. The responsibility of the hospital and staff in seeing that patients receive all possible attention and service, taking into consideration the pocketbook of the patient, is evident. The need to bring these two considerations together in an ideal service for the sick cannot be disregarded. Group nursing offers an opportunity to hospitals to help the poor and middle class by affording an adequate care at a very nominal cost. It would, therefore, appear to be an experiment entirely worth while in any institution.

NATIONAL HOSPITAL DAY

May 12th, the birthday of the immortal Florence Nightingale, is celebrated throughout the length and breadth of this land as National Hospital Day—a day "set apart to bring into closer relationship and into a better understanding the communities and their institutions," as the Bulletin of the A. H. A. expresses it.

Fitting programs are given annually in thousands of communities on this date, serving the dual purpose of a memorial to Florence Nightingale, and in bringing before the American people the need and purpose of the hospital.

Because of the unusual success attending the program of National Hospital Day in Thomasville, Georgia, last year, the National Advisory Committee of the American Hospital Association to the Archbold Memorial Hospital a certificate indicating the fact that

it was the most successful among the many programs held.

Under the direction of Col. James L. Bevans, director of the John D. Archbold Memorial Hospital, no attribute of success was overlooked. Local newspapers and the moving picture theatre called special attention to the celebration, which began at 9 o'clock the morning of May 12th, with visiting and inspection of the Archbold hospital. Following this came graduation exercises of the school of nursing; also a public ceremony in connection with enrollment of the new class of probationers. A big luncheon, a pageant, a burlesque clinic and operation were some of the special features. The serious purpose of National Hospital Day was not overlooked; dignity was in evidence. One of Thomasville's leading citizens delivered an educational address in the afternoon. Altogether, the results have been very beneficial, it is said. Personal contact with the people of the community, including some of the most influential and progressive citizens, is an invaluable asset; co-operation with the various civic and other organizations, churches, clubs and groups, is of vital import. The school of nursing and other departments of the hospital are said to be profiting because of this celebration of National Hospital Day, creating as it did the friendliest of feelings for the local hospital.

It is hoped more of our cities and communities will celebrate National Hospital Day next year.

GEORGIA NURSES ATTENDING BIENNIAL

Some of the Georgia nurses attending the Biennial of the three National Nursing Organizations, in Louisville, Ky., June 4-9, were Miss Annie Bess Feebeck, president of the Georgia State Nurses' Association; Mrs. Eva S. Tupman, president of the Georgia League of Nursing Education; Miss E. Alma Brown, vice-president of the G. S. N. A.; Mrs. Alma Albrecht, secretary of the G. S. N. A.; Miss Cora E. Byers, president of the First District, G. S. N. A.; Mrs. Joseph Akerman, president of the Second District; Mrs. Mae M. Jones, president of the Third District; Mrs. Isadore Hermann, president of the Fifth District; Miss Jane Van De Vrede, Executive Secretary of the G. S. N. A.; Miss M. Celia

Johnson, Miss Lillian Cumbee, Mrs. J. F. Hawthorne, Miss Willie Nell Logan, Mrs. Sue Paille, Miss Elmina Austin, Miss Mattie Lou Banks, Mrs. E. C. Westcott, Miss Vera Mingledorff, Miss Effie Davis, Miss Lillian Alexander, Miss Marion S. Doane, Miss Lucia Massee, Mrs. Dorothy Hahn Treakle, and Miss Frances Braden.

THE DIAGNOSIS OF EARLY PULMONARY TUBERCULOSIS

(Continued from page 258)

4. All advanced cases of pulmonary tuberculosis should be segregated in sanatoria. The segregation of advanced cases is one of the foundations of the present day decrease in the incidence of the disease. While in the home they should be educated to maintain rigid hygiene and to dispose of the sputum properly.

CASE REPORT

I am presenting with this paper a report of a case which has been under observation for over two years and has been under my care for several months.

A white boy seventeen years of age came in to the clinic of the Wesley Hospital in October of 1925, complaining of general weakness. His past history was briefly, that he had not been well for several years, having had his tonsils out several years before and having been treated for hook worm several times during this period. One sister had been diagnosed as having pulmonary tuberculosis and had spent several months at Alto. At this time the physical examination, laboratory and X-ray examinations were negative. One year later he entered the clinic complaining of pain in the left chest, sick headache, and general weakness. Nothing definite was found at this time on examination. In September of 1927 he came into the clinic complaining of stitch like pain in the left chest under the scapular and loss of appetite. In February, before he had been told by a doctor that he had pleurisy, and in March he was in Grady hospital with an acute bronchitis. Three months before this time his sister had died of tuberculous meningitis, having had a discharging sinus in her neck for approximately two years before her death. At this time his pulse was 90, and his temperature 99.4°.

The physical findings were retraction of the left apex, a pleural friction rub at the level of the left nipple, and the presence of granular breathing. The roentgen-ray film at this

time demonstrated a definite tuberculous involvement at the left apex. He was seen at intervals for some months and showed an acceleration of the pulse rate of from 90 to 120, a lowered blood pressure of 98/70, and the same physical findings already alluded to.

1. This case illustrates the necessity of long continued observation.

2. A history of contact for seven years with a sister who finally died from tuberculosis was obtained.

3. The presenting symptoms were general weakness, malaise, pain in the left chest and loss of appetite.

4. There was acceleration of the pulse rate accompanied by a lowered blood pressure, and a slight elevation of temperature.

5. Physical examination showed retraction of the left apex, a pleural friction rub and granular breathing.

6. Positive X-ray findings greatly sustained us in our diagnosis.

CONCLUSIONS

Long continued observation and moral courage are essential in the diagnosis of early pulmonary tuberculosis.

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DIAGNOSIS OF HYDROPS OF GALL-BLADDER BY GRAHAM TEST

William Snow, New York (Journal A.M.A., May 12, 1928), makes a diagnosis of hydrops of the gallbladder by the Graham test, and feels justified in saying that if the gallbladder is visualized as a large, faintly outlined shadow before dye and persists without any change with dye, and after fatty food, the diagnosis of hydrops may be made.

Woman's Auxiliary Medical Association of Georgia

OFFICERS

| | | | |
|-----------------------|--------------------------------|-------------------|----------------------------------|
| President..... | Mrs. C. C. Hinton, Macon | 3rd Vice-Pres.... | Mrs. A. J. Mooney, Statesboro |
| Pres.-Elect..... | Mrs. Marion T. Benson, Atlanta | Cor. Sec..... | Mrs. J. A. Selden, Macon |
| 1st Vice-Pres.... | Mrs. Wm. R. Dancy, Savannah | Rec. Sec..... | Mrs. Ralston Lattimore, Savannah |
| 2nd Vice-Pres.... | Mrs. W. F. Reavis, Waycross | Treasurer..... | Mrs. M. B. Allen, Hoschton |
| Parliamentarian | Mrs. J. Cox Wall, Eastman | | |

Delegates to A. M. A.

| | | | |
|--------------------------|---------|----------------------------|--------|
| Mrs. C. W. Roberts | Atlanta | Mrs. H. M. Fullilove | Athens |
|--------------------------|---------|----------------------------|--------|

DELEGATES TO THE A. M. A.

| | | | |
|--------------------------|---------|--------------------------|---------|
| Mrs. C. W. Roberts | Atlanta | Mrs. Geo. W. Fuller..... | Atlanta |
|--------------------------|---------|--------------------------|---------|

ALTERNATES

| | | | |
|-----------------------|---------|------------------------|---------|
| Mrs. Dan Y. Sage..... | Atlanta | Mrs. J. Cox Wall | Eastman |
|-----------------------|---------|------------------------|---------|

FOURTH ANNUAL MEETING OF WOMAN'S AUXILIARY MEDICAL ASSOCIATION OF GEORGIA

The Fourth Annual Meeting of the Woman's Auxiliary to the Medical Association of Georgia was held in Savannah, Georgia, May 8th to 11th.

The Woman's Auxiliary to the Georgia Medical Society (local), with Mrs. Ralston Lattimore as President, was hostess of the Convention, with the following Chairmen of Committees: Mrs. William H. Myers, General Chairman; Mrs. John S. Howkins, Sr., Meetings; Mrs. John W. Daniel, Registration; Mrs. Victor H. Bassett, Information; Mrs. William R. Dancy, Hospitality; Mrs. James N. Carter, Automobiles; Mrs. William Shearouse, Luncheon; Mrs. A. J. Waring, Banquet, and Mrs. C. F. Holton, Publicity.

On Wednesday morning, May 9th, members from all parts of the state registered at the De Soto Hotel, headquarters for the Convention. As each visitor registered she was presented with a most attractive package in green tarlatan, containing toilet articles, candy and other souvenirs from the Savannah merchants.

At 10:30 o'clock Wednesday, May 9th, the Executive Board met at the Huntingdon Club. Mrs. Paul Holliday of Athens, President of the State Auxiliary presided. Reports were read by the District Managers.

An elaborate luncheon was served at 1:30 P.M. at the De Soto Hotel to the delegates and guests. This was held on the new porch

dining room overlooking the court of palms. The tables were placed in the shape of a U, and in the open space stood a small table, which held a model of the Steamship Savannah, first steamship to cross the Atlantic Ocean. Silver bowls of pink roses and spring flowers were placed on the table, and on the place card of each guest was a hand-painted sketch of the Steamship Savannah, the handwork of Mrs. William Shearouse. Attractive dorines and bottles of perfume were presented to each guest. Mrs. T. P. Waring returned thanks. Mrs. Ralston Lattimore, President of the local Auxiliary, was the toastmistress. She introduced the state officers: President, Mrs. Paul Holliday, Athens; President-elect, Mrs. C. C. Hinton, Macon; First Vice-President, Mrs. Marion T. Benson, Atlanta; Second Vice-President, Mrs. William R. Dancy, Savannah; Corresponding Secretary, Mrs. Thomas Holcombe, Union Point; Recording Secretary, Mrs. J. A. Selden, Macon; Parliamentarian, Mrs. James N. Brawner, Atlanta. The third Vice-President, Mrs. H. L. Rudolph, Gainesville, and Treasurer, Mrs. Stewart R. Brown, Royston, were not able to attend the Convention. Mrs. Lattimore made a very gracious speech, in which she welcomed the visitors; and explained the significance of the ship decorations, giving a brief history of the Steamship Savannah. She brought her remarks to a close with a tribute to Mrs. William H. Myers, a distinguished ex-President of the state, who was Chairman of program and entertainment. During the luncheon delightful musical numbers were given by Mrs. Sidney McCandless, Miss Willie Shields, and Dr. Everett Bishop, accompanied by Mrs. Addie May Jackson.

After the luncheon an automobile ride was enjoyed through beautiful Savannah, and over the picturesque roads of Chatham County.

At 6:00 P.M. Dr. and Mrs. John S. Howkins were hosts to the Medical Association and the Auxiliary, at a beautiful tea at their home, 718 Drayton Street. The large rooms were a veritable garden of flowers. The tea table, with cover of lace and embroidery, had for its centre piece a silver bowl of pink roses, daisies, snapdragons and delphiniums, surrounded by unshaded pink candles in silver holders. Receiving with Dr. and Mrs. Howkins were Mrs. Paul Holliday of Athens, President of the State Auxiliary; Mrs. C. C. Hinton of Macon, President-elect; and Mrs. Ralston Lattimore, President of the local Auxiliary.

On Thursday morning, May 10th, at 10:30, the fourth annual meeting of the Woman's Auxiliary was called to order by the President, Mrs. Paul Holliday, Athens, at the Huntingdon Club, Savannah, Georgia.

The invocation was given by Dr. Neal L. Anderson, Pastor of the Independent Presbyterian Church of Savannah.

Miss Phoebe Elliott, President of the Huntingdon Club, spoke a few gracious words of welcome.

Mrs. Ralston Lattimore, President of the local Auxiliary gave the address of welcome. She spoke of the beautiful and historic spots in and around Savannah, which the delegates were urged to visit during their stay in the City.

Response of welcome was given in a very pleasing manner by Mrs. Cox Wall of Eastman, Manager of the Twelfth District.

Dr. C. E. Waites of Atlanta, spoke on the Medical Practice Act; and asked for the support of the Auxiliary in carrying out the Registration Bill, a copy of which was handed to every one present.

Dr. George Brown of Wisconsin, one of the distinguished visitors at the Convention, was introduced by Dr. Marion Benson of Atlanta, and spoke on the Interstate Post-graduate Organization, an organization of teaching.

One of the outstanding events of the meeting was the instructive and inspiring address, "As a Woman Thinketh," given by Dr. Stewart R. Roberts of Atlanta. He spoke of the power of the mind to control right and healthy living, as a woman thinketh so is she and as she is, so is her example to her community. He also stressed the importance of county hospitals.

Reports of District Chairmen and county auxiliaries were read.

Mrs. Paul Holliday, the President, gave her report, showing the splendid work the Auxil-

iary is doing. The report carried these recommendations: The names of state officers be placed on the mailing list of the State Medical Journal.

Dues be raised and paid to the State Treasurer not later than a stated time.

Districts be allowed to elect their managers at an annual district meeting.

Questionnaires be sent out in the fall to all county auxiliaries; so that they may know what is expected of them, and will make their reports accordingly. This report was accepted without recommendation, these recommendations to be voted on at the next annual meeting.

Reports of other officers read and accepted.

A motion was made and carried that the appointment of the delegates to the American Medical Association be left to the discretion of the President.

Delegates to the Southern Medical Association were elected: Mrs. C. W. Roberts, Atlanta; Mrs. George Fuller, Atlanta; alternates, Mrs. Dan Sage, Atlanta; Mrs. Cox Wall, Eastman.

The Nominating Committee, Mrs. James N. Brawner, Chairman, recommended the following officers: President, Mrs. C. C. Hinton, Macon; President-elect, Mrs. Marion T. Benson, Atlanta; First Vice-President, Mrs. William R. Dancy, Savannah; Second Vice-President, Mrs. W. F. Reavis, Waycross; Third Vice-President, Mrs. A. J. Mooney, Statesboro; Corresponding Secretary, Mrs. J. A. Selden, Macon; Recording Secretary, Mrs. Ralston Lattimore, Savannah; Treasurer, Mrs. M. B. Allen, Hoschton; Parliamentarian, Mrs. Cox Wall, Eastman.

The new officers were duly elected for the following year.

Mrs. C. C. Hinton, the newly elected President, in a most gracious manner, accepted the office of President, and outlined plans of the year's work.

After the meeting, Miss Phoebe Elliott, President of the Huntingdon Club, served delicious refreshments in the club's lovely drawing room.

In the afternoon from four to five the guests were taken to the Telfair Academy of Arts.

The closing entertainment of the Convention was a beautiful banquet at the De Soto Hotel, for the delegates and visitors. It was given on the enclosed porch dining room co-incident with the banquet of the Medical Association in the main dining room. The dining room, beautifully decorated, presented a gay appearance, hung with Japanese lanterns, and palms placed all around the room. The guests were seated at small tables with the long speakers' table on one side of the room.

The tables were decorated with silver bowls and vases of roses, poppies, daisies, larkspurs and snapdragons, shades of yellow predominating, and alternating with the flowers were yellow candles in silver holders. Each guest was presented with a souvenir tied with yellow ribbon.

Mrs. William H. Myers acted as Toastmistress, introducing the various speakers with apt phrases. Mrs. Lloyd B. Taylor returned thanks, while Mrs. John S. Howkins, Sr., gave a greeting to the visitors in her charming manner. Mrs. Myers introduced the newly elected officers, and Mrs. C. C. Hinton, the new President, made a short talk. Mrs. James N. Brawner, Atlanta, gave a toast to "Our Husbands," which mingled humor with seriousness.

Mrs. T. P. Waring gave the toast to "The Wives," which introduced the clever play written by her and entitled "The Helping Hand, a Sketch for Doctor's Wives." Mrs. Walter Norton, as the doctor's wife, who is keeping office hours in the absence of the secretary, gave a realistic interpretation of the part; and each of the other characters were excellently done. Those taking part were:

| | |
|-------------------|---------------------------|
| The Impatient One | Mrs. Lee Howard |
| The Adoring One | Mrs. William Shearouse |
| The Catty One | Mrs. John S. Howkins, Jr. |
| The Worried One | Mrs. Julian Quattlebaum |
| The Youthful One | Mrs. Wesley Espy |
| The Grateful One | Mrs. Elton Osborne |
| The Voluble One | Mrs. C. F. Holton |

The play was greatly enjoyed and was repeated for the Medical Association. After the banquets, a brilliant ball was given in the main dining room, the Georgia Medical Society being host. Preceding the ball a beautiful pageant of fashions of the last one hundred years was given. Each costume and its wearer was introduced, and incidental music played. Those in the pageant and the costumes they wore were:

Miss Mary Barrow, in a costume worn by Anne Barnwell Devoe in 1776.

Miss Christine Thesmar, in a gown worn by her great great grandmother, Mrs. John Wallace in 1815.

Miss Leona Simkins, in a gown worn by Lucy Hobson Lumpkin (1820), wife of Governor Wilson Lumpkin.

Mrs. W. T. Dixon, in a costume of Cornelia Davenport, later Mrs. Henry Jackson.

Mrs. M. Hines Roberts of Atlanta, in the gown worn by her great aunt, Mrs. John

Whitehead, in 1860, when she attended the ball given in honor of the Prince of Wales.

Miss Eugenia Johnston, in a costume worn by her grandmother, Mrs. James R. Johnston in 1865.

Mrs. Julian Hartridge in a costume worn by Mrs. George Walker at Mardi Gras in New Orleans in 1860.

Mrs. Wesley Espy in a wedding gown of Miss Gibbons in 1840, owned by Mrs. Gordon Saussy.

Miss Isabel Harrison in a costume of the "Gay Nineties."

Miss Mary Birdsey in the costume she wore representing Savannah at Asheville Historical Pageant a few weeks ago.

Following this pageant the ball opened with a grand march, led by Dr. William R. Daney and Mrs. Paul Holliday, after which general dancing was enjoyed.

ARE WE FACING A NURSING CRISIS IN GEORGIA

(Continued from page 246)

be the responsibility of the sick to increase the dividend returns of hospitals. The financial responsibility belongs to the whole community, and the cost of education of special students likewise in so far as they serve the public, or insure its safety.

The physician and the nurse, too, have shouldered too great a part of this financial burden. But the physician has been less affected, because he is an independent worker in the field of health; while the nurse is not. Then, too, the nurse in the home or hospital who saves his return visit of the day to the patient (for which he often could not bring himself to charge) helps the physician to widen his professional margins. He is able to see more patients and earn more money. Not so the nurse.

"She faces a declining scale economically from the day she leaves the hospital as a graduate nurse, if she does private nursing," says Miss Adelaide Nutting, an authority on nursing. Truly, not only in Georgia, but throughout the country, we face a crisis. Reforms are clearly indicated. They can be made and made rapidly when there is a will to do so. In this case, it requires the composite will of the physicians and nurses and the public.

Georgia Tuberculosis Association

OFFICERS AND STAFF

| | | | |
|-------------------|---------------------------------|---------------------------|---------------------------------|
| President..... | Lee M. Happ, Macon | Treasurer..... | T. K. Glenn, Atlanta |
| 1st Vice-Pres.... | I. A. White, D.D., Cartersville | Managing Director..... | Jas. P. Faulkner, Atlanta |
| 2nd Vice-Pres.... | R. W. Hatcher, Milledgeville | Health Education Director | |
| Secretary..... | Miss Virginia Gibbes, Marietta | | Miss Mildred S. Manson, Atlanta |
| | | Office Secretary..... | Miss Julia Bone, Atlanta |

4 Capitol Square, S. W. Atlanta, Ga.

ADVISORY MEDICAL COMMITTEE

| | | | |
|-------------------------|---------|-------------------------------|---------|
| E. C. Thrash, M.D. | Atlanta | J. H. Bradfield, M.D. | Atlanta |
| Z. S. Cowan, M.D. | Atlanta | Allen H. Bunce, M.D. | Atlanta |
| C. C. Aven, M.D. | Atlanta | Stewart R. Roberts, M.D. | Atlanta |

ANNUAL MEETING

At the Annual Meeting of the Georgia Tuberculosis Association, held in Atlanta, May 24th, Mr. Lee M. Happ of Macon was elected President; Dr. I. A. White, Cartersville, First Vice-President, and Mr. R. W. Hatcher of Milledgeville, Second Vice-President. The Secretary, Miss Virginia Gibbes of Marietta, and the Treasurer, Mr. T. K. Glenn of Atlanta, were re-elected.

Mrs. F. G. Hodgson, Dr. T. F. Abercrombie, Dr. Allen H. Bunce, and Dr. C. C. Aven of Atlanta, were elected to the Executive Committee, the President, Secretary, and Treasurer being ex-officio members.

President Happ was also designated the representative of the Association on the National Directorate and the present Managing Director, Mr. James P. Faulkner, was re-elected.

Reports submitted listed eighty-three associations and committees affiliated with the State organization. The financial statements of these committees showed an expenditure of \$95,624.36 during the calendar year 1927. An aggregate of 3,300 cases was handled, vast quantities of literature distributed, and health education and publicity campaigns conducted to instruct the public in the methods of prevention and treatment of tuberculosis and the betterment of health conditions in general.

The report of the State Office showed an expenditure for the year of \$13,382.20, listed the care of 338 patients, 1,488 conferences, 14,639 miles traveled in the interest of the work, 11,000 letters written, and approximately 100,000 pieces of literature distributed.

In addition many addresses were given in different parts of the State, radio messages broadcasted, and a number of specific campaigns carried on in the interest of the program.

RESISTANCE AND IMMUNITY IN TUBERCULOSIS

If tubercle bacilli infecting man (human type) are introduced into the tissues of birds, such as the pigeon, the bacilli do not multiply and the infection does not spread to other organs to produce tuberculosis. The resistance in this instance is an inherited character of the animal and is designated natural immunity. Since the disease obtains no foothold whatever, the immunity is said to be complete or absolute. Some mammals are not really infected when inoculated with tubercle bacilli of the human type but usually a local focus of infection follows although the disease does not spread to distant parts. This imperfect resistance to the disease is a relative or partial immunity.

In the young human individual there is little evidence of any natural immunity to tuberculosis since infection of infants during the first year of life is followed by a very high mortality. In older children there is ample evidence that infection occurs and later becomes arrested as the result of a resistance on the part of the tissues to the growth and multiplication of the bacilli. There may be then, after the first year of life, a check at least on the spread of the disease through the body. However, tubercle bacilli may remain

District and County Societies

DISTRICT OFFICERS

FIRST DISTRICT

President.....Lanier, L. F., Rocky Ford
1st Vice-Pres....Myers, Wm. H., Savannah
2nd Vice-Pres.....Elarbee, G. W., Daisy
Sec'y-Treas.....Long, W. V., Savannah

SECOND DISTRICT

President.....Chason, Thomas, Donalsonville
Sec'y-Treas.....Watt, Chas. H., Thomasville

THIRD DISTRICT

President....Stukes, J. T., Americus
Vice-Pres.....Daves, V. C. Vienna
Sec'y-Treas.....Greer, Chas. A., Oglethorpe

FOURTH DISTRICT

President.....Clark, W. H. LaGrange
Sec'y-Treas.....Callaway, Enoch, LaGrange

FIFTH DISTRICT

President.....Ansley, W. S., Decatur
Vice-Pres.....Barber, W. E., Atlanta
Sec'y-Treas.....Camp, R. T., Fairburn

SIXTH DISTRICT

President.....Miles, W. C., Griffin
Vice-Pres.....Miller, G. T., Macon
Sec'y-Treas.....Thompson, O. R., Macon

SEVENTH DISTRICT

President.....Harbin, R. M., Rome
Vice-Pres.....Wood, C. V., Cedartown
Sec'y-Treas.....McCord, M. M., Rome

EIGHTH DISTRICT

President....Johnson, J. E., Elberton
Vice-Pres.....Reynolds, H. I., Athens
Sec'y-Treas.....Carter, D. M., Madison

NINTH DISTRICT

President.....Coker, Grady N., Canton
Vice-Pres.....Neal, L. G., Cleveland
Sec'y-Treas.....Bennett, J. C., Jefferson

TENTH DISTRICT

President.....Cranston, W. J., Augusta
Vice-Pres.....Revell, S. T. R., Louisville
Sec'y-Treas.....Phinizy, Irvine, Augusta

ELEVENTH DISTRICT

President....McMichael, J. R., Quitman
Vice-Pres.....Fleming, Albert, Folkston
Sec'y-Treas.....Reavis, W. F., Waycross

TWELFTH DISTRICT

President.....New, J. E., Dexter
Vice-Pres.....Edmondson, J. W., Dublin
Sec'y-Treas.....Cheek, O. H., Dublin

1928 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 20, 1927.
2. Turner County, Dr. J. H. Baxter, Ashburn, November 15, 1927.
3. Terrell County, Dr. Logan Thomas, Dawson, December 1, 1927.
4. Pike County, Dr. M. M. Head, Zebulon, December 3, 1927.
5. Ben Hill County, Dr. L. S. Osborne, Fitzgerald, December 8, 1927.
6. Evans County, Dr. S. T. Ellis, Claxton, December 29, 1927.
7. Taylor County, Dr. J. C. Hind, Reynolds, January 3, 1928.
8. Jasper County, Dr. E. M. Lancaster, Shady Dale, January 6, 1928.
9. Talbot County, Dr. C. C. Carson, Talbotton, January 28, 1928.
10. Wayne County, Dr. M. N. Stow, Jesup, February 9, 1928.
11. Lamar County, Dr. Jno. M. Anderson, Barnesville, March 6, 1928.

12. Terrell County, Dr. Logan Thomas, Dawson, March 7, 1928.

13. Stephens County, Dr. C. L. Ayers, Toccoa, March 8, 1928.

14. Upson County, R. L. Carter, Thomas-ton, March 15, 1928.

15. Crisp County, Dr. J. N. Dorminy, Cordele, April 5, 1928.

16. Henry County, Dr. H. C. Ellis, McDonough, April 10, 1928.

17. Dougherty County, I. M. Lucas, Albany, June 6, 1928.

NEW MEMBERS

Bryant, V. L., Bartow.
Grant, N. L., LaGrange.
Griffith, E. F., Eatonton.
Henley, J. T., Douglasville.
Johnson, B. F., Garfield.
Parham, LeRoy G., Chipley.
Powell, J. W., Sylvania.
Reddick, A. B., Sylvania.
Smith, D. D., Swainsboro.
Taliaferro, V. H., Eatonton.
Thrash, J. A., Columbus.
Turner, W. A., Newnan.
Williams, R. L., Columbus.

SEVENTH DISTRICT MEDICAL SOCIETY

Cedartown, Ga., April 4, 1928.

The Seventh District Medical Society met in Cedartown Wednesday, April 4, 1928 at 10 A.M. Dr. W. E. Wofford, President, Dr. M. M. McCord, Secretary.

The sessions were held at the Cherokee Golf Club House and a delightful barbecue luncheon was served at 1 P.M.

For the sake of shortening the program, thus giving time for a full discussion of each paper, the formality of an address of welcome and response was waived by committee.

Invocation Rev. B. B. Long

The minutes of the Dalton meeting were read and adopted.

Dr. M. M. McCord, Councilor, made his report and urged a greater effort on all members in helping to build up the State Association.

The scientific papers were read as follows:

1. Middle Ear Infection. R. P. Cox, Rome
2. Indications for and Clinical Results from Non-Surgical Gall-Tract Drainage
George M. Niles, Atlanta
Discussions by Drs. McCall,
Blackman and Chaudron
3. Osteo-Myelitis. J. H. Mull, Rome
Discussion led by Dr. Radcliff
4. Gonorrheal Arthritis, Theo Toepel, Atlanta
Discussion led by Dr. Mull
5. Common Foot Troubles,
E. J. Radcliff, Rome
Discussion by Dr. Toepel
6. How the Medical Association of Georgia Can Help the Individual Doctor
M. M. Head, Zebulon
Councilor, 6th District
7. Preventing Typhoid Fever
Dr. Sellers, State Board of Health
8. Annual Address of the President
W. E. Wofford, Cartersville
9. Dr. J. T. McCall invited the Society to be his guests at Rome for next regular meeting, September 26th. His invitation was unanimously accepted.
10. Dr. Shamblin offered a resolution of sympathy to Dr. England who, on account of illness could not attend the session. Also a resolution of thanks to the Polk County Society was offered for their splendid hospitality and the excellent barbecue luncheon.
11. Election of Officers: R. M. Harbin, Rome, President; C. V. Wood, Cedartown, Vice-President. There was no election of Secretary, Dr. M. M. McCord having been

elected to this office last April for two years.

M. M. McCord, M.D.,
Secretary.

COUNTIES REPORTING FOR 1928

DECATUR COUNTY MEDICAL SOCIETY

Decatur County Medical Society announces the following officers for 1928:

President—E. C. Smith, Donalsonville.

Vice-President—W. L. Wilkinson, Bainbridge.

Secretary-Treasurer—Jno. I. Spooner, Donalsonville.

Delegate—L. W. Willis, Bainbridge.

WALTON COUNTY MEDICAL SOCIETY

Walton County Medical Society announces the following officers for 1928:

President—H. L. Upshaw, Social Circle.

Vice-President—J. B. H. Day, Social Circle.

Secretary-Treasurer—J. K. McClintic, Monroe.

Delegate—C. S. Floyd, Logansville.

TREUTLEN COUNTY MEDICAL SOCIETY

Treutlen County Medical Society announces the following officers for 1928:

President—Geo. M. Barwick, Soperton.

Vice-President—O. B. Moye, Soperton.

Secretary-Treasurer—L. I. Lanier, Soperton.

Delegate—L. I. Lanier, Soperton.

SCREVEN COUNTY MEDICAL SOCIETY

Screven County Medical Society announces the following officers for 1928:

President—L. F. Lanier, Sylvania.

Vice-President—W. R. Lovett, Sylvania.

Secretary-Treasurer—W. W. Evans, Haleyondale.

Delegate—A. B. Reddick, Sylvania.

DOUGLAS COUNTY MEDICAL SOCIETY

Douglas County Medical Society announces the following officers for 1928:

President—C. V. Vansant, Douglasville.

Vice-President—J. T. Henley, Douglasville.

Secretary-Treasurer—D. Houseworth, Douglasville.

HABERSHAM COUNTY MEDICAL SOCIETY

Habersham County Medical Society announces the following officers for 1928:

President—J. H. McClure, Cornelia.

Vice-President—W. H. Garrison, Clarkesville.

Secretary-Treasurer—R. B. Lamb, Demorest.

Delegate—W. H. Garrison, Clarkesville.

Censors—O. N. Harden, J. B. Jackson and W. V. Chandler.

LAMAR COUNTY MEDICAL SOCIETY

Lamar County Medical Society announces the following officers for 1928:

President—J. A. Corry, Barnesville.

Vice-President—J. M. Rogers, Barnesville.

Secretary-Treasurer—Jno. M. Anderson, Barnesville.

Delegate—C. H. Willis, Barnesville

Censors—C. E. Suggs, C. H. Willis and J. M. F. Barron.

BOOK REVIEWS AND ABSTRACTS

Mark S. Dougherty, M. D.
Department Editor

BOOK REVIEWS

Gonococcal Urethritis in the Male, by Pelouze, W. B. Saunders Co., Philadelphia, Price, \$5.00. This book is not intended as a text book and for this reason there is much freedom in discussion. It is a record of the personal experiments of Dr. Pelouze. While some methods of treatment are left out, there is no doubt that those suggested should give good results. It is simply and clearly written and makes very interesting reading. It goes clearly into methods of injections, irrigations, etc., as well as into suggestions as to agencies to use. Part II gives an analyses of case histories. This part is of particular interest as it portrays the disease as it is presented to the physician. The book is designed particularly for the use of the general practitioner.

M. K. Bailey, M. D.,
563 Capitol Ave., S. W.,
Atlanta, Ga.

Tobacco and Physical Efficiency. A Digest of Clinical Data with annotated Bibliography by Pierre Schrupf-Pierron, M. D., Professor of Clinical Medicine, University of Cairo. Pages 134. Paul B. Hoeber Inc., New York. Price \$1.85. This book fulfills a distinct need in medical literature. It is written not as a personal opinion of the subject but rather as a review of the literature. It is an abstract and compendium of the available literature of the work on the subject. An exhaustive bibliography of seven hundred and fifty references is appended to the book. This is of course its chief value.

M. S. D.

Nutrition and Diet in Health and Disease by James S. McLester, M. D., Professor of Medicine at the University of Alabama, Birmingham. First Edition; pages 759. W. B. Saunders, Philadelphia, 1927. This book has long been needed by students and practitioners, both young and old. It should appeal to all on account of its sound principles which are based on a wide experience. The introduction defines nutrition, food and food-stuffs and also tells of the standard values and the vitamins. Part I deals with nutrition in health. Here we find some helpful psychology in its relation to diet and food. Part I, section C, chapter IX, pertaining to the Feeding of Infants, is written by Dr. McKim Marriott, Professor of Medicine at Washington University, St. Louis.

Part II takes up nutrition in disease with special emphasis on the diseases in which diet is of paramount importance. Part II, section C, chapter XXV, on The Feeding of Surgical Patients, is written by Dr. Barney Brooks, Professor of Surgery at Vanderbilt University, Nashville. Part III displays Tables and Charts of a General Nature which should prove valuable to any physician, dietitian or layman. The book as a whole is well written and the subject matter is excellent and very up-to-date. The subject of Diet is covered in all of its many phases. The book presents not only the opinions of the author but also the opinions of many other widely known physicians regarding diet in certain conditions. I recommend this book very highly to all who desire a good reference book on the subject of diet.

E. A. Baueker, Jr., M. D.

A Text Book of Clinical Neurology—I. S. Wechsler. W. B. Saunders Co., 1927. The essentials of modern neurology are presented from the clinical view-point, so that practitioners will find this a very useful book. Unfortunately the consideration of many subjects has necessarily been brief, but the essentials of diagnosis and treatment are well covered. The methods of examination are well outlined, and include psychometric tests by David Wechsler. In consideration of the neuroses, the author favors the Freudian viewpoint in classification and explanation. In general, the book is an excellent presentation of modern neurology.

Wm. A. Smith, M. D.

Brain and Mind—The Nervous System of Man. R. J. A. Berry. The Macmillan Co. 1928. In this book, the author draws attention to the physical basis of the healthy and disordered "mind," from the standpoint of the neuron structure of the brain. The book is an important contribution from that standpoint, and will serve to focus attention on the neuron changes in mental disturbances. The author considers the minute anatomy of the central nervous system both from the embryologic and phylogenetic standpoint, and the book is of value for that alone. However, there will be much controversy over many of the author's deductions. The "mind" must be considered today in a broader manner than simply as the function of the brain cells. The author considers that many mental disturbances are due to a lack of the normal number of neurones in

the brain, or a physical or functional disturbance of the neurones. He states that an increased number of neurones is the basis of genius, and a deficient number is the basis of amentia. He believes that with proper training, many functional disturbances in the neurones can be overcome, and rich combinations of neurones developed, resulting in increased mental capacity. He believes that the granular layer of the cortex has a receptive function, the infragranular layer an instinctive function, and the supra-granular layer a reasoning function. He speaks of the storage of words, ideas and memories in neurones, as so much physical material. Many of the statements in this book can hardly be considered as proven. The book represents the extreme of the physical or organic viewpoint in regard to the mind and its disturbances. It must be read with caution by the uninitiated, in neuropsychiatry.

Wm. A. Smith, M. D.

BOOKS RECEIVED

Gonococcal Urethritis in the Male, for Practitioners. By P. S. Pelouze, M.D., Associate in Urology and Assistant Genito-Urinary Surgeon at the University of Pennsylvania. Octavo volume of 357 pages, illustrated. Cloth, \$5.00. Philadelphia & London: W. B. Saunders Company, 1928, West Washington Square, Philadelphia.

Folklore of the Teeth. By Leo Kanner. It is probably little known, except among anthropologists and students in special fields, that the teeth have been the source of much mystery among peoples of all races and creeds. Special significance in the minds of savage and semi-civilized peoples is attached to the number and arrangement of the teeth. Incantations directed against toothache bound among ancient peoples, and even, as the author demonstrates, figure prominently in the traditions of Christian civilized peoples. The names of saints appear in many of the "toothache prayers." . . . This book will be welcomed by students as well as by all who are interested in science presented in popular terms. On sale at all bookstores or direct from the publisher. Contains 316 pages. The Macmillan Company, 60 Fifth Ave., New York.

The Glands Regulating Personality. New Edition. By Louis Berman, M.D. Seven years have passed since Dr. Berman's now well-known book appeared in its first edition making available to the medical profession the important results of his research and offering to the layman a volume in which a scientific subject was presented in a most engrossing, fascinating style. These seven years have given his theories, concerning the action of the glands of internal secretion as active factors in the regulating and building of personality, a

more secure basis of scientific truth and in this period Dr. Berman has continued his research making new discoveries of great importance. These are recorded in the new and revised edition of his book which is now available. A new type of personality, the parathyroid-centered type, is described and all the recent advances in endocrinology are discussed. Contains 341 pages. Publishers: The Macmillan Company, 60 Fifth Avenue, New York.

The International Medical Annual, A Year Book of Treatment and Practitioners' Index by J. H. Anderson, C.M.G., C.B.E., M.D.; R. G. Bannermann, M.A., M.D.; Joseph Blomfield, B.A., M.D.; Digby Chamberlain, Ch.M., F.R.C.S., and others. The present issue of the Medical Annual does not differ materially from any of its immediate predecessors. It is, however, believed that all the recent improvements have been more than fully maintained. Contains 574 pages. Publishers: William Wood & Company, 51 Fifth Avenue, New York. Price, \$6.00.

Manual of Operative Surgery by John Fairbairn Binnie, A.M., C.M., F.A.C.S., Surgeon to the Christian Church, the Research and the General Hospitals, Kansas City, Missouri; Fellow of the American Surgical Association; Member of the DeSociete Internationale De Chirurgie, Member of the Western Surgical Association. Eighth Edition, Revised and Enlarged with 1628 illustrations, a number of which are printed in colors. Contains 1311 pages. Price, \$12.00. Publishers: P. Blakiston's Son & Company, 1012 Walnut St., Philadelphia.

First Aid and Medical Service in Industry compiled from a survey made principally to ascertain the methods employed in the industries in applying first aid measures to injured employees. This book is a condensation of the result of a special survey of a number of typical industries in the United States. Contains 134 pages. Publishers: Johnson & Johnson, New Brunswick, New Jersey.

The New York Academy of Medicine, Lectures on Medicine and Surgery. First Series, 1927. Contributors: Harlow Brooks, M.D., visiting physician to the City Hospital of N. Y., John F. Erdman, M.D., Director of Surgery, Post-Graduate Hospital, N. Y.; John E. Jennings, M.D., Senior Surgeon, Brooklyn Hospital; Samuel Kopetzky, M.D., Professor of Otology, New York Polyclinic Medical School and Hospital, et al. The first series of practical lectures for the general practitioner arranged by the Committee on Medical Education and given at the New York Academy of Medicine in 1926-1927 met with such favor that the lectures are now published in book form. Contains 319 pages, with 39 illustrations. Publishers: Paul B. Hoeber, Inc., 76 Fifth Avenue, New York.

COMMUNICATIONS

Dr. Allen H. Bunce, Secretary
Medical Association of Georgia
Atlanta, Ga.

Dear Doctor Bunce:

I am in receipt of your official notification of my election as President of the Medical Association of Georgia at the Savannah meeting, May 9-11, 1928, for this year. I am deeply appreciative of this high honor, an honor more than I deserve I assure you, but as my beloved Association has seen fit to place this preferment upon me, I shall devote what little talent there is in me to promote its interests.

I wrote you a letter Saturday and asked for an appointment with you so that I may have your advice about the standing committees and other routine work concerning the organization.

With kind regards, I am,

Faithfully,

C. K. SHARP, M.D.

May 14, 1928, Arlington.

IN RE: CHRONIC APPENDICITIS

Dr. Richard C. Cabot
Cambridge, Mass.

Dear Doctor Cabot:

While attending the Second District Medical Meeting at Bainbridge, Georgia, and discussing a paper on appendicitis, I took occasion to quote some of your teachings as I recall them with reference to chronic appendicitis. I quoted you as stating in June, 1926, before your class that after a study of one hundred so-called chronic appendices and one hundred normal appendices that the Clinician, Surgeon and Pathologist could see no difference, thus aiding you in arriving at the conclusion that there was no such disease as chronic appendicitis.

Dr. E. C. Thrash of Atlanta, Georgia, who is one of the leading diagnosticians in the south, challenged the statement, saying that he thought the teaching was entirely too radical to let go by. He, along with other physicians present, wanted to know how you would classify recurrent appendicitis where the patient had gone through a number of attacks without operative interference. After some discussion and the fact being brought out that chronic appendicitis was no longer accepted on a death certificate as cause of death, we agreed that a direct statement from you would be of great interest, so I agreed to communicate with you and request an explanation, reporting back at our next meeting. The only reference that I can find in your Physical Diagnosis states that it can be diagnosed only by X-ray and that there are no symptoms or signs characteristic and that it rep-

resents only a harmless, anatomical landmark, a shrivelled appendix. I would appreciate very much a letter from you at your convenience.

J. A. REDFEARN, M.D.,
Albany, Georgia.

April 18, 1928.

Dear Dr. Redfearn:

Chronic appendicitis is in my opinion a scandal to American medicine. The pathologists that I know refuse to make the diagnosis in the vast majority of cases operated on under that diagnosis. The study that I referred to was made by Dr. E. A. Codman of Boston and published by him some years ago. It showed that 100 appendices removed as a matter of routine in cases operated on for fibroid of the uterus and other lesions and without any thought of the appendix before operation,—appendices removed, that is, merely because the abdomen was open and the patient might some day get appendicitis, showed on pathological examination just as much change (fibrosis, shrivelling, etc.), as 100 other appendices removed for "chronic appendicitis."

With most of the surgeons and pathologists whom I know "chronic appendicitis" is a joke. The organ normally becomes fibrous sooner or later in most cases and that is all one finds.

Now recurrent acute attacks of appendicitis with fever, leukocytosis, tenderness and spasm locally, are, of course, a familiar disease—no more "chronic" than recurrent pneumonia or recurrent erysipelas. I recognize this form of appendicitis as a common one of course. The scandal is the diagnosis made for pain only, usually in woman, without evidence of inflammation, without eventual any pathology and usually without relief to the pain.

It is, I think, high time that these facts should be recognized. Anyone can verify them.

Yours cordially,

RICHARD C. CABOT.

April 22, 1928.

To the Editor:

Have been looking over State Medical Journals in the library of the New York Polyclinic Medical School and Hospital and am sure proud that the Georgia Journal is equal and better than most of them, so could not resist writing you regarding same as I feel like you have been solely responsible for the improvement of the Journal in the last few years.

I am getting some very good work, really much more than expected.

W. F. Reavis, M. D.

New York Polyclinic
Medical School and Hospital,
New York
May 17, 1928.

Dr. Allen H. Bunce, Secretary,
Medical Association of Georgia,
Dear Doctor Bunce:

On May 15, the amendment to the Revenue Reduction Bill that called for an increase in the tax under the Harrison Narcotic Act from \$1.00 a year to \$3.00 a year was defeated in the Senate. Senator George took an active part in the debate, supporting the position of the American Medical Association and assisting in the defeat of the amendment.

Will you not write to him an appropriate letter of thanks?

Sincerely yours,

Wm. C. Woodward,
Executive Secretary,
Bureau of Legal Medicine
and Legislation

May 18, 1928
Chicago.

Dr. Allen H. Bunce, Secretary
Medical Association of Georgia

Dear Doctor Bunce:

I thank you for your letter of May 2, enclosing copies of telegrams received by you from Senators George and Harris relative to the Robinson Amendment. Your efforts and those of Senators George and Harris are greatly appreciated. Possibly they will be able to help if Senator Robinson brings up his amendment on the floor.

WM. C. WOODWARD,
Executive Secretary,
Bureau of Legal Medicine
and Legislation.

May 7, 1928, Chicago.

NOTICE TO TAXPAYERS

The 1928 Revenue Act, signed by the President on May 28, 1928, reduces the special tax in class 3 under the Harrison Narcotic Law, as amended (retail drug business) from \$6.00 to \$3.00 per annum, effective July 1, 1928.

J. T. Rose,
Collector,
District of Georgia.

May 31, 1928.
Atlanta.

NEWS ITEMS

Dr. Ross P. Cox, Rome, is taking post-graduate work at the University of Vienna, Austria. He will return in September.

Drs. W. H. Perkinson, Marietta, and M. M. McCord, Rome, were appointed by Governor L. G.

Hardman as members of his official staff with the rank of lieutenant-colonel.

Dr. J. L. Garrard, Rome, has made numbers of professional calls in cities of his section in his aeroplane.

The staff of McCall Hospital, Rome, elected the following officers for the ensuing year: Dr. J. C. Watts, President; Dr. W. G. Barnett, Vice-President; Dr. R. O. Simmons, Secretary. The annex to the hospital has been completed, new furniture and fixtures have been installed.

The Second District Medical Society will hold its next meeting at Camilla in November.

Dr. M. C. Baines, formerly of Augusta, and in charge of the United States Veterans' Hospital No. 62, has been transferred to the Veterans' hospital at Bronx, New York.

Dr. E. L. Connally celebrated his ninety-first birthday at his home on Ashby Street, Atlanta, on May 6. Only intimate associates and members of the family were guests. He received during the day felicitations from hundreds of friends and associates.

The Marietta Hospital will be completed and ready for occupancy by July 1. A bronze tablet perpetuating the memory of Dr. Warren E. Benson, president of the hospital association at the time of his death, will be placed in a conspicuous place at the front of the building.

Dr. and Mrs. Thos. H. Brabson, Cornelia, entertained the members of the Habersham County Medical Society and their wives on April 19.

Dr. S. L. Cheshire, Thomasville, was elected by the Thomas County grand jury as a member of the county board of health.

Dr. D. W. Register, Atlanta, has been employed as commissioner of health for Colquit county to succeed Dr. T. B. Harper, who resigned.

Dr. Richard Binion, Milledgeville, is taking a post-graduate course at the University of Pennsylvania School of Medicine, Philadelphia.

Dr. Wm. A. Mulherin, Augusta, past President of the Medical Association of Georgia, has been elected to membership in the American Pediatric Society. It has been stated that he is the first Georgian to be elected to membership in this Society and that there are only eighty-five members in America.

Dr. George V. I. Brown, Milwaukee, speaker of the assembly of the Interstate Post-Graduate Medical Association of North America, was in Atlanta early in May making plans for the annual session of the Association to be held in Atlanta, October 12 to 19.

The Rockefeller Foundation has selected Macon as one of twelve cities in which to train its students in carrying out health programs. Drs. Julio Freijanes and Rodrigo, provisional health officers of the national health service of Spain, have fellowships in the Rockefeller Foundation and will be the first to visit Macon.

The Nolan Sanitarium and the Marietta Hospital, Marietta, have merged and will occupy the new hospital building which is nearing completion. Dr. W. Mayes Gober has been elected chairman of the board of directors and will serve as chief surgeon.

Dr. Tom Williams, Washington, D. C., began a series of lectures on mental hygiene at Duke University, Durham, North Carolina, on June 12 and will continue until about August 1.

Dr. Dunbar Roy, Atlanta, has gone to Sweden and Denmark. He will attend the International Congress of Oto-Laryngology at Copenhagen in July and return to Atlanta in the late summer.

OBITUARY

Dr. Thomas Walter Reeves, Member, Carrollton, Chicago College of Medicine and Surgery, Chicago, in 1916; aged 42; died, April 8, 1928, at a sanatorium in Atlanta after a period of illness which lasted for about a year. He was a prominent physician and held in high esteem by the people of his home county. Dr. Reeves was a member of the Carroll County Medical Society, the American Medical Association, and the Bathany Christian church. Surviving him are his widow, one son, Thos. W., Jr.; three sisters, Mrs. L. M. Helton, Mrs. D. M. Hesterlee, and Miss Lura Reeves, Carrollton; three brothers, J. B. and Lester Reeves, Carrollton, and Grady Reeves, Atlanta. Funeral services were conducted from Black Gum church and interment in Jordan cemetery near Carrollton.

Dr. Nathaniel Taylor Carswell, Member, Macon, College of Physicians and Surgeons, Baltimore, Maryland, in 1886 aged 67; died May 1, 1928, at his home, 269 Hardman Avenue. He was on the staff of the Bayview Hospital, Baltimore, for a number of years, later going to Berlin, Germany, for a post-graduate course. Dr. Carswell moved

to Macon and practiced medicine for more than thirty years before his death. He was a member of the Scottish Rite masons, Shrine, and the First Presbyterian church. Surviving him are his widow, two sons, Nathaniel and Robert Carswell; one daughter, Miss Elizabeth Carswell, all of Macon.

Dr. Jacob Lee Mathews, Hawkinsville, Emory University School of Medicine, Atlanta, in 1898; aged 54; died, April 18, 1928, at his home. He served the people of Pulaski county faithfully for twenty-four years and won an enviable reputation as a physician. Dr. Mathews was a member of the Masonic lodge and the First Methodist church. Surviving him are his widow, four sons and three daughters. Funeral services were conducted from his home by Rev. W. H. Ketchum and Rev. W. D. Ogletree. Interment in Orange Hill cemetery.

Dr. Philip Hamilton Fitzgerald, Member, Blakeley, Atlanta College of Physicians and Surgeons, Atlanta, in 1910; aged 47; died April 30, 1928, of heart disease. He served with the American Expeditionary Forces in France for nine months during the World War and was promoted to the rank of major. Dr. Fitzgerald took an active part in fraternal and religious affairs. He was a member of the American Legion, Rotary club, Masonic lodge, and the Blakeley Baptist church. Surviving him are his mother, widow, two daughters and two brothers. Funeral services were conducted from the home by Rev. J. S. Hartsfield and Rev. Guyton Fisher and interment in the city cemetery.

COCAINE NO LONGER NECESSARY

Cocaine has been widely used by nose specialists in spite of the toxicity and habit forming tendencies of this dangerous drug. The double purpose for which it is used is to produce anesthesia and to shrink the mucous membranes.

It has now been discovered that a combination of Butyn 1/2%, and Ephedrine 1%, produces anesthesia and shrinks the mucous membranes, both actions being markedly prolonged with this solution. The dosage used is much less toxic than the concentration of cocaine used to produce equal anesthesia. Butyn-Ephedrine Solution is not habit forming and requires no narcotic blank. It was developed in the research Department of the Abbott Laboratories, North Chicago, Ill., and is supplied in 1 oz. bottles.

Members Registering at Annual Session at Savannah

May 9, 10, 11, 1928

A

Aaron, I. E., Lyons
 Abererombie, T. F., Atlanta
 Adams, B. C., Thomaston
 Aldrich, F. N., Brunswick
 Alexander, G. T., Vidalia
 Allen, E. W., Milledgeville
 Allen, M. B., Roschton
 Amis, Frank J., Hogansville
 Anderson, Jno. M., Barnesville
 Andrews, E. D., Athens
 Applewhite, J. D., Macon
 Atwood, G. E., Waycross
 Aven, C. C., Atlanta
 Ayers, A. J., Atlanta
 Ayers, C. L., Toccoa

B

Bailey, D. V., Elberton
 Baker, E. L., Columbus
 Baker, J. O., Savannah
 Barrow, Craig, Savannah
 Bashinski, Benj., Macon
 Baskin, C. L., Temple
 Bassett, V. H., Savannah
 Battey, Calder R., Augusta
 Bazemore, Wallace L., Macon
 Beard, J. S., Edison
 Bedingfield, W. E., Rentz
 Benson, Marion T., Atlanta
 Bernard, G. T., Augusta
 Birdsong, H. W., Athens
 Bishop, E. L., Atlanta
 Blackmar, F. B., Columbus
 Boland, Frank K., Atlanta
 Boland, S. A., Thomson
 Born, W. H., McRae

Bostwick, W. A., Milledgeville
 Bowcock, Harold M., Atlanta
 Bowdoin, Joe P., Atlanta
 Bowen, A. J., Portal
 Bowen, J. H., Cobbtown
 Boyd, F. H., Allendale
 Branham, H. M., Brunswick
 Brawner, Jas. N., Atlanta
 Bray, S. E., Savannah
 Broderick, J. R., Savannah
 Brooke, Geo. C., Canton
 Brooks, Thos. G., Augusta
 Bryan, S. H., Reynolds
 Bryant, V. L., Bartow
 Buchanan, D. J., Savannah
 Bunce, Allen H., Atlanta
 Burdshaw, Jas. F., Augusta
 Burford, R. E. L., Brunswick
 Burford, Robert S., Brunswick
 Byne, J. M., Waynesboro

C

Cabaniss, W. H., Athens
 Cail, J. C., Sylvania
 Calhoun, Abner W., Atlanta
 Calhoun, F. Phinzy, Atlanta
 Camp, W. R., Fairburn
 Carter, J. G., Scott
 Champion, W. L., Atlanta
 Chandler, J. H., Swainsboro
 Chaney, Ralph H., Augusta
 Charlton, Thos. J., Savannah
 Chason, Gordon, Bainbridge
 Chaudron, P. O., Cedartown
 Cheek, O. H., Dublin
 Cheney, J. N., Lindale
 Chisholm, Julian F., Savannah
 Clark, James J., Atlanta
 Clark, T. H., Douglas
 Claxton, E. B., Dublin
 Clay, Grady E., Atlanta
 Clay, T. S., Savannah
 Cline, B. McH., Atlanta
 Coker, Grady N., Canton
 Cole, W. A., Savannah
 Coleman, A. S. M., Douglas
 Coleman, E. T., Graymont
 Compton, H. T., Savannah
 Cone, R. L., Statesboro
 Conn, Webb, Griffin
 Corson, E. R., Savannah
 Coulter, R. M., LaFayette
 Cranston, W. J., Augusta
 Crawford, H. C., Atlanta
 Crozier, G. T., Valdosta

D

Daney, Wm. R., Savannah
 Daniel, J. W., Claxton
 Daniel, Jno. W., Savannah
 Davis, A. W., Warrenton
 Davison, Hal M., Atlanta
 Davison, T. C., Atlanta
 Deal, B. A., Statesboro
 Dean, J. G., Dawson
 DeCaradeuc, St. J. R., Savannah
 Dees, J. H., Alston
 Decker, C. J., Athens
 Dellinger, A. H., Rome
 DeLoach, L. A., Savannah
 Demmond, E. C., Savannah
 Denton, Jno. F., Atlanta
 Dorminy, E. J., Fitzgerald
 Dougherty, Mark S., Atlanta
 Downan, Chas. E., Atlanta
 Drane, Robert, Savannah
 Dunn, Lawrence B., Savannah

E

Eaton, Paul, Augusta
 Ebbert, C. A. P., Grantville
 Edwards, D. B., Savannah
 Egan, M. J., Jr., Savannah
 Elarbee, Geo. W., Daisy
 Elliott, J. L., Savannah
 Elliott, W. G., Atlanta
 Ellis, S. T., Claxton
 Elrod, J. O., Forsyth
 Emery, W. B., Atlanta
 Epting, M. J., Savannah
 Evans, W. W., Halcynondale
 Exley, H. T., Savannah
 Ezell, H. E., Oliver

F

Faggart, G. H., Savannah
 Fike, R. H., Atlanta
 Findley, C. W., Vidalia
 Floyd, Chas. S., Logansville
 Floyd, Earl, Atlanta
 Floyd, J. T., Atlanta
 Floyd, W. E., Statesboro
 Fort, A. G., Atlanta
 Fort, M. A., Bainbridge
 Fountain, Jas. A., Macon
 Fowler, A. H., Milledgeville
 Fowler, R. W., Marietta
 Franklin, R. C., Swainsboro
 Frye, Augustus H., Griffin
 Fuller, Geo. W., Atlanta
 Fullilove, H. M., Athens

G

Garner, J. R., Atlanta
 Gaines, Lewis M., Atlanta
 Garrard, J. L., Rome
 Garrison, D. H., Tate
 Garrison, W. H., Clarksville
 Gary, Loren, Georgetown
 Gay, T. Bolling, Atlanta
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POLLEN CONTENT OF AIR

From a comparison of the pollen content of the air determined each day in different localities in Kansas City, Mo., and in different years in Kansas City, and from a comparison of similar counts made in Kansas City, Chicago and Oklahoma City, W. W. Duke and O. C. Durham, Kansas City, Mo., (Journal A. M. A., May 12, 1928), account for differences in the severity of the symptoms of surface allergies, such as hay-fever, asthma and eczema at different seasons and on different days in the same season and in different localities on the same day. It is also easy to explain why treatment of a given symptom which may be successful in one city or one year may be a total failure in another city or in the same city in a different year. They discuss the various different seasons affecting pollen determination such as tree season, grass season and ragweed season.

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RESISTANCE AND IMMUNITY IN TUBERCULOSIS

(Continued from page 267)

alive for months and even years in foci in which they are confined. In children after two years of age, rather generally, lesions as the result of tuberculous infection increase in number with the advancing age of the child until, at 14 or 15 years of age, probably one-half show these lesions. In later years the number of individuals with latent infected tuberculous foci approaches 100%. If an adult, therefore, takes into the body with the respired air living tubercle bacilli, the infection is introduced into an individual already infected. Such a person is resistant to the new infection. This resistance to superinfection is the only immunity to tuberculosis known today. It is an acquired immunity that is relative rather than absolute. This intolerance of the infected animal for tubercle bacilli freshly introduced into its tissue was first clearly demonstrated by Koch. If a healthy guinea pig be inoculated with a culture of tubercle bacilli the wound closes and appears to heal, but a hard nodule forms in about two weeks and an ulcer soon appears and persists until the animal dies. A guinea pig already infected from an earlier inoculation behaves upon reinoculation in a fashion entirely different from that of the normal animal. The skin at the site of reinoculation becomes violently inflamed and red within twenty-four hours and sloughs off with ulceration. Unlike the lesion of the normal guinea pig, effective healing is at once initiated and the ulcer soon heals without a spread of the infection to the surrounding tissues. This peculiar reaction of the tuberculous animal to reinfection is known as the "phenomenon of Koch" and in it is embraced our present day knowledge of immunity to tuberculosis.

INDUSTRIAL MONTH

April was designated as "Industrial Month" by the Abbott Laboratories. During this period a survey of the principal industries in various sections of the country was made to determine to what extent the following Abbott and D. R. L. items are being used in industrial medicine:

Butyn, for the removal of foreign substances from the eye.

Butesin Picrate Ointment, the pain relieving antiseptic dressing for burns.

Chlorazene, the simplified Dakin antiseptic for immediate application to wounds, cuts and bruises to prevent infection.

Metaphen, the powerful mercurial germicide with a phenol co-efficient of over 500; non-irritating, stainless and practically non-toxic.

Izal, a white emulsion used for disinfectant purposes. Phenol co-efficient 10, by U. S. Hygienic Laboratory method.

Dichloramine-T, *Chlorcosane* and *Parresined Lace-Mesh Dressing*.

A special booklet, "The Industrial Medicine Chest" has been prepared by the Abbott Laboratories, North Chicago, Ill., for distribution to physicians interested in industrial medicine.

NEW ABBOTT—D. R. L.—MILLIKEN PRICE LIST

One of the most handsome and modern price-lists ever published by a pharmaceutical house is now being distributed by the Abbott Laboratories.

This list, beautifully designed and printed in attractive colors, contains 176 pages. Included in this price list, will be found not only the principal products of the Abbott Laboratories and the Dermatological Research Laboratories but also a list of the most important preparations of the house of John T. Milliken & Co., of St. Louis, which was acquired by The Abbott Laboratories on January 3, 1928.

Since the World War the Abbott Laboratories has taken front rank in research in synthetic medicinals. When we entered the war, it was assigned the task of producing some of the more important medicinals heretofore made only in Germany, such as Barbitol, Procaine and Cinchophen. Soon it added Anesthesin, Acriflavine, Neutral Acriflavine and Neocinchophen. From the very beginning of its venture into the chemical field, original research, looking to the discovery of new and valuable products, has been part of the program of the house, and the result is the introduction of a number of valuable new synthetic drugs, among them Butyn, Butesin and Butesin Picrate, Neonal and Metaphen.

In the hands of The Abbott Laboratories and under the direction of Dr. George W. Raiziss, the "D. R. L." has made steady progress, not only in the production of large quantities of the arsphe-namines of constantly improving quality; but also in fine research leading to the creation of valuable new synthetics, such as Metaphen, Bismarsen and Salihexin.

Still another forward step was the moving of The Abbott Laboratories from Ravenswood, in Chicago, to the splendid new plant, consisting of a group of fourteen buildings on a tract of twenty-five acres, looking at North Chicago, Illinois.

The Abbott Laboratories is built upon research, and greater pride is taken in the scientific achievements of the house than in its financial success. As stated by the President of the firm, Alfred S. Burdwick, M. D., "We believe that the future of this institution must rest upon sound scientific work. Our policy, therefore, may be epitomized as follows:

Advertise. If a product possesses outstanding merit, don't grudge the money necessary to bring it to the attention of prospective users.

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After seven years handling the accounts of the leading men of the medical and dental professions of Nashville, Tennessee, the Doctor's Adjustment Bureau has come to Atlanta and has succeeded beyond the expectations of the physicians and dentists who have favored them with their accounts.

This organization caters exclusively to the collecting in a high class, diplomatic manner the accounts of the members of the recognized societies of the two professions. These accounts are handled on a contingent basis.

In addition to the tactful and efficient manner in which the accounts are handled, they maintain

a credit rating record of every debtor as to the manner in which he meets his obligations.

The Bureau will be pleased to furnish reference from responsible physicians and others with whom they deal.

Doctor: "Have you taken every precaution to prevent the spread of contagion in your family?"

Rastus: "Absolutely, doctah, we've done bought a sanitary cup and we all drink from it."

—Courtesy of "Anagrams."

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Volume XVII

Atlanta, Ga., July, 1928

No. 7

BONE CHANGES IN DISEASES OF INFANCY AND CHILDHOOD*

CLIFFORD G. GRULEE, M.D.
Chicago

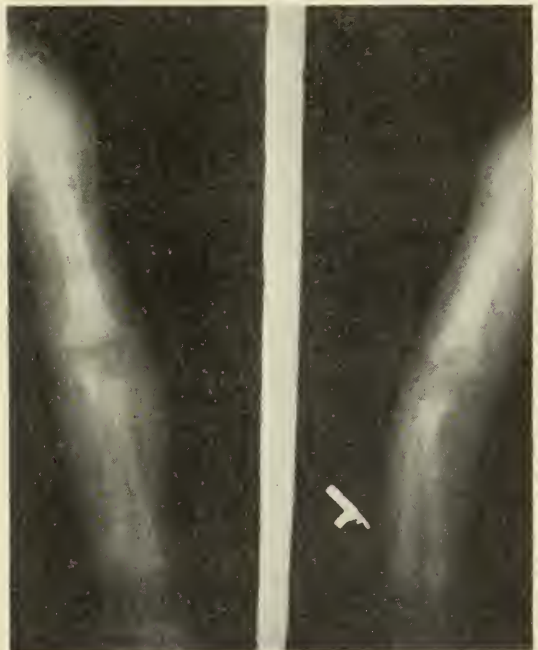
Gentlemen, In presenting this subject to you, I lay no special claim to profound knowledge of bone changes or of bone pathology. My prime object in choosing this subject is to try to show bone changes in many of the diseases of infancy and childhood, and especially with the idea of helping in general diagnosis.

The principal lesions which we find in the bone are in the long bones as a rule and there are three locations where these might occur, at the epiphysis, in the shaft, or in the periosteum. As a rule the epiphysis is the most important. Of course, it is by means of the X-ray that during life we are able to get definite information regarding these.

The first pictures which I wish to show you, are those of Rickets. In Rickets the epiphyseal changes are most important. The irregularity of calcification leads to a very characteristic change at the epiphyseal line. In the more severe cases this line shows more marked irregularities than in any other disease. In addition to this irregularity there is a distinct cupping of ends of the long bones. Later during the healing process these ends may appear to be fringed. It is very hard to say from a single X-ray picture that healing is taking place. When healing has finally resulted there is found a distinct lipping at the ends of the bone. In the shaft of the bone the principle changes are curvature and greenstick fractures. The periosteum sometimes seems to be raised on the concave side of the curvature. This phenomenon has not been mentioned often in the



I—Rickets showing cupping of lower end of radius at epiphyseal border



II—Rickets. Shows marked fringing of ends of bones of forearm at wrist

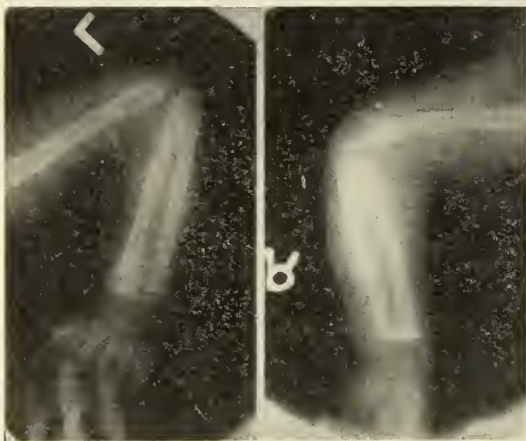
*Read before the Medical Association of Georgia, Savannah, Ga., May 10, 1928. Invited guest.



III—Rickets. Same as Figure II with green-stick fracture



V—Rickets. Curvature of tibiae showing raised periosteum



IV—Rickets. Healed



VI—Scurvy. Showing thick epiphyseal line and ring around clear center of ossification

literature, and may lead to confusion with the lesions of syphilis.

In Scurvy the changes are two; first there is a distinct increase in the density of the picture at the epiphyseal line which is thickest in its center and tapers towards the periphery. This line is also seen about the center of ossification and about the small bones of the wrist and ankle. When hemorrhage beneath the periosteum takes place the latter is seen to be raised from the shaft of the bone. Usually the distance between the shaft

and the periosteum is much greater than we see in other conditions.

In syphilis the epiphysis is quite irregular. Usually this irregularity is not nearly so marked as is that of rickets. There is a dense zone at the epiphyseal junction, and above this at the lower end of the shaft a relatively clear zone. This lesion is found even in the newborn and very early in the course of congenital syphilis. The condition may lead eventually to separation of the epiphysis and the so called Parrot's pseudo-



VII—Syphilis. Showing irregular epiphyseal line

paralysis. Early in congenital syphilis the periosteum is frequently seen to be raised from the shaft, and in the first three months of life this lesion is very diagnostic. The later lesions of syphilis are so well known that we will not go into them here.

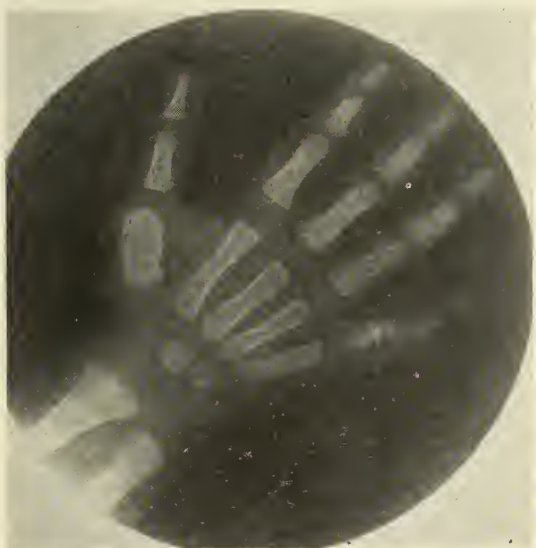
Just a word about osteomyelitis. The X-ray shows nothing in this condition until the destructive processes have begun or a sequestrum is beginning to form. Therefore, in the early stage we are much more likely to be confused by the X-ray than helped.

The lesions produced by tuberculosis are so well known, and so destructive in character that it is rather hard to mistake them in the X-ray picture. I will not dwell on these, but show you only a few examples.

The next series of pictures is that of osteitis fibrosa cystica. This occurred in a little girl five years of age, in which, after one



VIII—Syphilis. Showing marked irregularity of epiphyseal line with clear zone immediately above



IX—Tuberculosis of metacarpal and phalangeal bones

year the cyst was enucleated. The epiphyseal line of growth was disturbed, but straightened out after the removal of the



X—Osteitis fibrosa cystica. Original defect



XI—Same showing healing one year after operation



XII—Osteogenesis imperfecta. Skull



XIII—Same. Showing fractures of long bones



XIV—Chondrodystrophy. Skull

cyst. The next condition is that known as osteogenesis imperfecta. In this condition which is congenital in origin, the children come into the world with many fractures. The shafts of the long bones are seen to be broad and stubby, and to have a very thin cortex. Practically all the long bones are fractured. The skull is quite soft, and shows

on X-ray many defects in ossification. In fact it gives the impression of a membranous structure in which are found islands of bone. Next is oxycephalus, a congenital deformity in which the frontal portion of the skull is pushed upward and somewhat forward. The upper portion of the orbit is



XV—Same. Long bones



XVII—Osteochondroma



XVI—Bone Cyst



XVIII—Sarcoma

pressed downward and forward in such a way as to make it almost horizontal in direction thus pressing on the optic nerve, and causing optic atrophy. The result of the pressure in the skull causes the formation of digital depressions. Another condition which is congenital in origin, is chondrodystrophy. In this the extremities are short and thick and the head large with an overhanging fore-

head. The shape of the head is caused by a premature synostosis of the spheno-basilar joint. This condition too, shows digital depressions, but these are not so marked as in oxycephalus. The long bones show a short thick shaft with very broad and curved epiphysis. Rather interesting is the case of os-



XIX—Multiple Myeloma. Skull



XX—Same. Long Bones

teoarthropathy in which we see a destruction of the ends of the terminal phalanges. The remaining slides are of bone tumors showing cases of bone cyst, osteochondroma, a very rare condition, sarcoma and multiple myeloma. The latter condition is exceedingly rare and the X-ray of the skull very characteristic and interesting.

BURNS*

THE TANNIC ACID METHOD OF TREATMENT

THOMAS HARROLD, JR., B.S., M.D.

Macon

Any method of treating severe burns that will relieve the patient of the excruciating pain of daily dressings and at the same time relieve the doctor of eighty or ninety per cent of the unpleasant work of taking care of a severely burned patient, would be worthy of adoption for those reasons alone. Tannic acid will do this and several much more important things. The purpose of this paper is to describe this very simple method and recommend it to your use.

To Doctor E. C. Davidson of the Henry Ford Hospital in Detroit, all credit is due for the use of tannic acid in treating burns. The original idea was his.

In burns of sufficient extent and severity to threaten the life of the victim the following features are of utmost importance and appear in the order mentioned.

1—*Shock*. In severe burns shock is almost immediate and often very severe. It is probably caused by a combination of severe trauma to the tissues and the extreme pain.

2—*Concentration of the blood*. This manifests itself after a few hours and is not thoroughly understood. It is probably due to a combination of direct loss of fluid through the burned area, a secondary effect of the shock with poor absorption of fluids supplied, and some as yet do not understand metabolic reaction. It is known that the chloride content of the blood is markedly lowered.

3—*Toxemia*. This condition is usually most marked three or four days after the burn, but may develop at any time for a week or more after the burn. It is generally thought to be due to protein decomposition products that are absorbed from the burned area. The effect of the toxin on the kidneys and adrenals is particularly bad.

4—*Infection*. Of course infection may ensue at any time but it is usually most dangerous at the time that sloughs begin to sep-

*Read before Bibb County Medical Society, March 6, 1928.

arate unless, as occasionally happens, an erysipelas develops earlier.

5—*Scar Formation.* Although the factors mentioned above are dangerous to life and, therefore, of paramount importance the ultimate result with scar formation, disfigurement and disability are also of great importance. Of course the amount of scar formed is determined primarily by the extent and depth of the burn but it can be controlled within certain limits by limitations of infection and other appropriate treatment.

So in evaluation of any therapy the factors enumerated above must be carefully considered.

The properties of tannic acid as given by Davidson are chiefly as follows:

It is soluble in water, alcohol and glycerin. Insoluble in ether and chloroform.

It precipitates proteins, alkaloids and some glucosides. It forms a stable compound with body fluids and tissues. This coagulating effect self-limits the depth of its penetration of body tissues. Strong solutions may have a caustic instead of tanning effect on body tissues.

As compared with other substances sometimes used in the treatment of burns the action of tannic is more like that of picric acid than anything else but it does not produce the toxic symptoms sometimes caused by picric acid when applied to a large area. Nor does picric acid form the substantial protective coagulum that is produced by tannic acid.

Method of Application of Tannic Acid. Tannic acid in powdered form should be kept in accident rooms and in doctors' bags in appropriate quantity to make about a 3% solution when dissolved in a quart of water. Tannic acid in solution will keep for a week or so but if kept for a long time it decomposes into the less active gallic acid. However, its ready solubility in water makes the powder the most compact and accessible preparation to be kept on hand for treating burns.

As the tannic acid is in aqueous solution it is very important that no oil or grease of any kind be applied to the burns or if it has been applied, that it be removed as thoroughly as possible before using tannic acid.

The burned area is cleaned of gross dirt, burned clothing, charred tissue, etc., but no effort is made to clean up completely.

Bandage with sterile gauze applying the gauze direct to the burned area. Soak dressings with 3% tannic acid. Keep *soppy, soaking wet* with tannic acid for 24 hours or until the coagulated tissue is light brown in color.

Wet dressings thoroughly and remove carefully so as not to disturb the soft coagulum.

Expose burned area to the air under a frame draped with sterile linen if possible, so that nothing comes in contact with the burn, and make great efforts to avoid infection. This is the critical stage of the treatment. An electric light may be placed under the tent to hasten drying of the coagulum.

Do not disturb the coagulum. Trim away the edges of the coagulum as the epithelium grows under it and causes it to peel off. Do not try to hurry. If an edge becomes infected, trim it away and apply boric compresses. If infection really gets under the crust it must all be removed by soaking in boric or salt and trimming with scissors.

If this general method is carried out, when the wet tannic acid dressings are removed a soft, light brown coagulum will be seen covering the burn. In the process of drying this coagulum turns very dark brown and becomes as hard as a board. As the epithelium grows in from the edges—which it does rapidly—the margins of the coagulum separate and curl up and should be trimmed off. The secret of success with this method is to avoid infection before the coagulum dries and to let it alone, absolutely, afterwards.

In addition to this local treatment the usual supporting measures are carried out as vigorously as ever. The most important of these measures are the generous use of morphine and forcing of fluids by all available channels. Inasmuch as there is great loss of body chlorides, normal saline solution is strongly indicated. Care should be taken that the patient is kept warm while the wet dressings are being applied.

ADVANTAGES OF THIS METHOD

1—Mortality is perceptibly lower.

2—Pain is relieved as quickly by this tannic acid dressing as by any other.

3—Toxemia is less than by any other method. There is less shock because of the quick relief of pain and the early limitation of absorption from the wound. After the coagulum is completely formed there is a minimum amount of absorption from the burned area. Loss of body fluids from the burned surface is greatly lessened and does not continue after the coagulum becomes dry. There is less nephritis and associated nitrogen retention.

4—The coagulum forms a perfect protection for the growing epithelium and prevents infection. The resulting scar is, therefore, thinner and more pliable than is usually seen by other methods of treatment.

5—Last but not least, the average convalescence is definitely shortened and the ease of application and small amount of surgical care is highly pleasing to both patient and doctor.

In severe third degree burns where the epithelium is completely destroyed and perhaps the fascia also, of course rapid healing can not be expected. However, it is desirable to treat with tannic acid until the acute stage and danger of toxemia is passed, see how much healing will take place from the edges, then remove the coagulum and a suitable bed for grafting can be prepared in a few days. This method of treating burns is at present in use in many hospitals throughout the country. I have treated several patients by this method and the change from the long, painful unpleasant dressings that had to be changed almost daily for weeks on end to only three or four days of careful attention and after that a shortened convalescence of relative comfort for the patient is one of the most striking changes that I have ever seen.

SUMMARY

The treatment of burns with tannic acid by the method of Davidson is the most satisfactory method of handling these cases and is strongly recommended.

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 Beck and Powers: *Annals of Surgery*, LXXXIV, 1926, 19.

THE PARANASAL SINUSES IN NON-TUBERCULAR PULMONARY INFECTIONS*

REPORT OF FOUR CASES†

T. S. BURGESS, M.D.

Atlanta

Disease of the paranasal sinuses in association with pulmonary infection has been noted too often to be incidental. The types of infection mentioned are: laryngo-tracheitis, chronic bronchitis, bronchiectasis, non-tuberculous basilar infection, and apical catarrh.

Louis H. Clerf¹ of Chevalier Jackson's bronchoscopic clinic, writing on this subject, says: "In referring to textbooks on laryngology one finds that a chronic infection of the accessory sinus is one of the commonly accepted etiologic factors in the production of a laryngotracheitis; also that active treatment of the nasal condition will often be followed by improvement or complete cure of the infection in the lower respiratory tract. I have commonly found, by performing bronchoscopy in these cases, that a chronic bronchitis is associated with the laryngotracheitis. It may be therefore assumed that inspiration of material from an infected nasal fossa can and does produce a laryngotracheobronchitis, and that removal of the primary focus will do much towards clearing up the secondary infection. There is such a vast amount of clinical evidence to substantiate the relation between disease of the paranasal sinuses and chronic laryngotracheobronchitis that I believe it can be accepted as a clinical fact." He says further "If there is a concomitant infection of the nasal accessory sinuses the patient should first be treated for this. If he has not been treated, the sinus infection, irrespective of its original etiologic significance, exerts an unfavorable influence on bronchiectasis."

Dunham and Shavlem² of Cincinnati, reported a study of three hundred and eighty-

*Read before the Fulton County Medical Society, Atlanta, Ga., Oct. 20, 1927.

†Thanks are due to Dr. L. W. Dean of Iowa City, Ia., from whose clinic at the University Hospitals at Iowa City the writer selected the cases herein reported

nine cases reported to them for roentgenographic study with diagnoses of pulmonary tuberculosis. They found that twenty-eight per cent of them were non-tuberculous conditions associated with some focus of infection, and that in the majority of cases the infection was in the paranasal sinuses.

Mullin^{4 5 6} and Ryder of Cleveland injected india ink into the frontal and maxillary sinuses of rabbits and cats, and killed the animals from three to seventy days afterwards. By tracing the carbon deposits, the lymphatic drainage from the sinuses was found to be by way of the cervical and internal jugular nodes, lymph ducts and great veins of the neck and thorax, right side of the heart and into the lungs. The bronchial and mediastinal glands were also involved. They repeated the experiments using washings from infected sinuses and suspensions of tubercle bacilli, and obtained similar results. This work definitely proves a second pathway of infection from sinuses to lungs in addition to aspiration of overflow. It also shows that the sinus with a thickened, diseased mucous membrane is really more dangerous than the one with a free overflow of pus; because, although there is absorption of infectious material, the sinus is often without symptoms and apt to escape detection.

Rest and Sargent, working with French soldiers, who had mistaken diagnoses of pulmonary tuberculosis, found that in the majority of cases the condition was a chronic bronchitis depending upon sinus infection. Correction of the sinus condition generally brought about a cure.

From the standpoint of pathology, diseased sinuses may be divided into four general groups: I. Acute Serous or Non-suppurative Infective. II. Acute Suppurative. III. Chronic Suppurative. IV. Chronic Hyperplastic. The condition if unrelieved generally progresses in this order, the chronic hyperplastic type being found in the most chronic cases. This type of infection is characterized by the thickened, polypoid, degenerated mucous membrane. There may be the formation of true polyps. There may or may not be much discharge. As would be expected, in chronic lower respiratory tract infection the infected

sinuses encountered usually fall into one of the last two groups.

The sinus most frequently involved is the maxillary. It is the most poorly aerated of the sinuses; and, consequently, most easily infected. It is the largest and offers more area for absorption than the other sinuses. Dunham and Shavlem indicate the site of disease in sixty-nine of their cases. Of these sixty-nine the maxillary sinus was involved in fifty-seven: alone in twenty-seven, and in association with the ethmoids in thirty. However, cases of long standing, it is not at all unusual to find a chronic, bilateral pansinusitis, any of the sinuses may be involved; and in

The symptoms pointing to sinus involvement are meagre. Seldom is there headache. There may be frequent head colds, but this is not the rule. Generally there is no anterior nasal discharge. Any posterior nasal discharge is overshadowed by the abundance of material coming up from below; and a history is not elicited except by careful questioning.

The diagnosis depends upon a careful rhinological examination. The X-ray has especial significance both as to diagnosis and as an aid in determining the course of treatment; because it is a great help in classifying the case.

The treatment is determined by the type of infection found. Cases in groups I and II should be given a careful course of conservative treatment before resorting to operative procedure. Groups III and IV generally require operative interference. In group III surgical drainage is usually sufficient. In group IV, the hyperplastic type, radical operative procedure is indicated, as all of the diseased membrane should be removed, and healthy tissue allowed to replace it. Since most of the diseased sinuses met with in chronic non-tuberculous pulmonary infections fall into the last two groups, the treatment is in the main operative.

REPORT OF CASES

Case I. L. I., a girl fourteen years of age with a history of cough and sputum for the past six years was referred with a medical diagnosis of bronchiectasis or empyema with bronchial fistula on the right side.

She had diseased tags of faucial and pharyngeal tonsils. X-ray of the sinuses showed blur-



X-Ray of Chest following lipiodol injection

ring of the maxillary, anterior ethmoids, and sphenoids on both sides. Nasoscopic examination revealed pus in both middle and superior meati. Thick pus was aspirated from the antra. Bronchoscopy showed pus in the bronchi of both sides, but only the bronchi of the right side appeared dilated. Lung mapping with lipiodol showed the terminal bronchi of the right side dilated and a large bronchiectatic or abscess cavity low down on the same side.

The diseased tags of tonsillar tissue were removed, rasp openings made into the maxillary sinuses under the inferior turbinates, and she was given courses of the following treatment: Daily nasal irrigation followed by five per cent argyrol, and postural treatment for the bronchiectasis. Every week or ten days under general anesthesia, the maxillary sinuses were washed out, and the lungs aspirated through a bronchoscope. In four or five weeks the sinuses would be clean, and she would be sent home to return in three months for observation and any treatment indicated.

At the end of ten months she showed some improvement, but was still bringing up one-half to one pint of sputum daily. The ethmoids were clean, the left antrum clean, but there was still some pus in the right antrum. However, in view of the fact that there had been some improvement in the sinus condition, it was decided to persist in the treatment a little longer before resorting to radical operative procedure.

Case II. W. M., a white girl nine years of age who had had a chronic productive cough following whooping cough four years ago, was referred from the pediatric department with a diagnosis of bronchiectasis.



X-Ray of chest after injection of lipiodol

X-ray plates after injection of lipiodol showed a large dilated left bronchus with marked clubbing of the terminal bronchi.

X-ray of sinuses revealed blurred antra, anterior ethmoids and sphenoids of both sides. Frontal sinuses were not developed.

The nasopharyngoscope disclosed much pus in each ethmoid and sphenoid region; and thick pus was aspirated from each maxillary sinus.

Rasp openings were made into the maxillary sinuses, and, because of very extensive involvement, bilateral evisceration of ethmoids and sphenoids was done. She was given the courses of treatment outlined in the preceding case report.

At the end of twelve months there was considerable improvement in her general condition, but there was no great change in the condition of her maxillary sinuses. The ethmoid and sphenoid regions had healed over very satisfactorily. Bilateral radical operations were performed on the maxillary sinuses, and each one was found to have a thickened, polypoid, necrotic membrane; and to contain much pus. She was sent home for three months.

When seen again, her nose was fairly clean, she was coughing very little, producing only about an ounce of sputum daily; and her general condition was much better. She was discharged to return in six months for observation.

Case III. C. H., a white man aged twenty years, was referred with a diagnosis of bron-

chiectasis. For several years he had had a chronic cough producing much foul sputum. His general condition was poor, and he had lost much weight.

The ear, nose, and throat history was negative except for post-nasal discharge.

The faucial tonsils were diseased, there was much pus in the nose, and X-ray gave evidence of extensive involvement of all of his sinuses. Foul pus was washed from each antrum. Lung mapping with lipiodol showed peribronchial thickening and clubbing of the terminal bronchi on the left side very suggestive of bronchiectasis.

The tonsils were removed; radical operations performed on all of his sinuses; and he was discharged.

He returned in three months for observation. The condition of his nose was satisfactory. He had less cough, and was producing much less sputum. His general condition was vastly improved. He was feeling fine, and had gained nineteen pounds in weight.

Case IV. E. S., a white girl aged twenty-one, complained of chronic cough producing much foul sputum. This had followed an attack of influenza eight months prior to admission. The medical diagnosis was chronic purulent bronchitis.

Except for some post-nasal discharge, nothing abnormal was found in the ear, nose, and throat history.

Her tonsils had been removed. There was pus in each middle and superior meatus and polypoid degeneration of the posterior ends of the middle turbinates. The X-ray showed involvement of the right antrum and of both ethmoids and sphenoids. There was evidence of both hyperplastic and suppurative change. Exploratory puncture washed thick pus from the right antrum.

A radical operation was performed on the right antrum; and thick, diseased, polypoid membrane found lining the sinus which was filled with pus.

She was called home, but returned in two months reporting that she felt better, and was coughing much less.

There was still considerable pus in the nose, and so bilateral evisceration of the ethmoids and sphenoids was done. She was discharged to return in six months for observation.

In considering these cases several facts stand out prominently.

First: The sinus disease was extensive, chronic, and very resistant to conservative treatment. This is well illustrated in the cases of the two children where on account of the age operative interference was resorted to

CLINICAL LABORATORY SERVICE IN THE UNITED STATES

STATEMENT BY THE COUNCIL ON MEDICAL EDUCATION AND HOSPITALS

During the last decade there has been much discussion in medical and laboratory journals and particularly on the platform of medical and laboratory conventions, regarding the status of the clinical laboratories of the country. Especially it was regretted that the practice of clinical pathology, regarded as one of the medical specialties, had fallen into disrepute. The fact was lamented that the laboratory work had fallen into the hands of lay technicians and become the toy of persons who had a purely commercial point of view and very little training for the work. Much disgust and quite a strong note of despair was sounded by those few members of the medical profession who had championed the cause of clinical pathology and had adopted that specialty as a life work.

Many letters were received at the office of the American Medical Association from practitioners of pathology and leaders in medicine, regretting the drift toward lay commercialism, and urging that something be done to counteract it. What to do about it was a question. Organizations of chemists were interested because some of their members ran laboratories. Likewise organizations of clinical pathologists, bacteriologists, and of the medical profession were equally interested. Some of these organizations working alone undertook to investigate and to standardize the practice of clinical pathology, hoping to check the drift of that practice into the hands of technicians and restore it to its rightful place as a medical specialty. The efforts of those organizations working single handed were of little or no avail except to emphasize the enormity of the task and the necessity for co-operation.

CO-OPERATION EFFECTED IN 1923

The necessary co-operation of the laboratory and medical organizations was brought about in 1923 at the annual meeting of the American Medical Association in San Francisco. At that time, delegates sent by the

American Chemical Society and the American Association of Pathologists and Bacteriologists separately petitioned the American Medical Association to establish some supervision over clinical laboratories. This led to the appointment of three committees representing the American Chemical Society, the American Association of Pathologists and Bacteriologists, and the Council on Medical Education and Hospitals. At a joint meeting of these committees in Chicago early in 1924, after much deliberation, certain basic principles underlying sound laboratory service were agreed upon which stressed especially a qualified bona fide director as the prime essential. The joint committee agreed that the work could best be conducted by the Council on Medical Education and Hospitals.

The first steps were: (a) to secure a complete list of laboratories in the country; (b) the preparation of a schedule of essentials in an approved clinical laboratory, and (c) the preparation of a questionnaire by which the essential facts regarding each laboratory could be obtained. Each of these measures was carried out with the advice and co-operation of fifty or more clinicians and others expert in laboratory work, including the committeemen of the above-named organizations, and by the officers of the American Society of Clinical Pathologists which very early showed an interest and from which the Council has received a hearty co-operation.

After being revised and adopted by all parties interested, the questionnaire was mailed to all the laboratories of the country and a most hearty response was received. A complete report of the survey. "Essentials of an approved Clinical Laboratory," and a preliminary list of laboratories which appeared to be fully complying with those "Essentials," were published in the Hospital Number of the Journal for April 3, 1928. The facts as published were submitted to the House of Delegates of the American Medical Association at the Dallas session in 1926 and approved by that body.

To assist in giving as fair consideration as possible to each application for approval, a strong committee of laboratory experts was formed in every state or section of the country. Those committees aggregate one hundred

and twenty individuals representing, as equally as possible, the co-operating organizations and hence the interests of the laboratory profession. Under the direction of the Council, each committeeman makes his investigation and renders his report or advice independently of other committeemen in the same district.

At the present time, of the three hundred and fourteen laboratories that have reported, one hundred and fifty-one, after careful investigation, have been placed on the approved list and other applications for approval are constantly being received.

The Council lends all possible assistance to laboratories whereby they may become eligible for admission to the accepted list. Every laboratory that makes a report and signifies a desire to conform to the requirements, is informed in regard to any deficiencies. The spirit of this movement all the way through is constructive. Anyone who knows the condition of the laboratory field at the time this survey was begun, would not expect very telling or spectacular results to be shown by this time; nevertheless, there are ample reasons for believing that actual improvements are being made: (1) A number of laboratories formerly run by technicians and only nominally under "medical" directors, have come under the ownership and actual control of clinical pathologists of high professional standing and ripe experience; (2) a number of laboratories under the control of technicians have gone out of business; (3) the "Essentials" have been published repeatedly and thus brought to the attention of all persons working in the field of clinical pathology; (4) there is an increased demand for pathologists to man the clinical laboratories of the country; (5) the director of the Mayo Foundation says that the salaries offered the pathological graduates of the Foundation are double those offered to other graduates of the Foundation; (6) the feeling of unsteadiness indicated in the discussions of a few years ago has subsided to a considerable degree, and there is a more hopeful attitude on the part of the clinical pathologists themselves.

FUTURE OUTLOOK

The movement is still in its beginning, but a good start has been made. To what extent doctors have actually discontinued sending

specimens to unapproved laboratories and are sending them to approved laboratories is not known. The educational results, however, are becoming increasingly evident. In order to secure the best analyses for the benefit of their patients as well as to best conserve the interests of the medical profession, physicians should refuse to have their work done at laboratories conducted under the direction of non-medical individuals. Much depends, also, on the continued hearty support of the various organizations and individuals who operate in the laboratory field. That this is already assured is indicated by the promptness with which laboratories have filled out and returned the form that has recently been mailed out by the Council on Medical Education and Hospitals for a complete and needed re-survey of laboratory service. The resulting data from this survey, were published in the *Journal of the A. M. A.*, March 24, 1928. Of course, any laboratories that are not yet on the list, will be promptly considered for approval, if they express such a desire.

PROCEEDINGS OF THE GENERAL
MEETINGS OF THE SEVENTY-NINTH
ANNUAL SESSION OF THE MEDICAL
ASSOCIATION OF GEORGIA,

SAVANNAH, MAY 9, 10, 11,

1928

FIRST GENERAL MEETING

WEDNESDAY, MAY 9

The Association was called to order at the DeSoto Hotel, Savannah, at 10:05 A.M., by the President, Dr. William A. Mulherin.

The President invited all the ex-Presidents in the audience to take a seat on the stage, and declared the Seventy-ninth Annual Session of the Medical Association of Georgia duly opened.

Invocation—Rt. Rev. Frederiek F. Reese, Bishop of Georgia.

Almighty and merciful God, who has manifested Thy nature in the person and work of the Lord Jesus Christ, the great and good Physician, we invoke Thy blessing upon this Association here assembled. May all their deliberations be guided from above, and their work toward the building up of that science be in accord with unity, and be fruitful, and in the influence of Thy Holy Spirit may all

the members realize that they are Thy ministers, alleviating the suffering of the sick, alleviating those ills that so bear down human life. May they see that their efforts accord to Thy holy will and their service be according to Thy will and life. Bless each one as he goes back to his community to exercise his skill and mercy. Bless those who are near and dear to them while they are attending this session, and lead us to Thyself, so that we may attend Thy service, and live with Thee in everlasting life. Amen.

PRESENTATION OF GAVEL

Dr. Frank K. Boland: I have noticed for many years that the Medical Association of Georgia possessed no gavel, and our officers had to bruise the skin on their knuckles, or borrow a percussion hammer from one of the exhibitors. On behalf of the two surviving daughters of Dr. Crawford Long, Mrs. Frances Long Taylor, and Miss Emma Long, of Athens, Georgia, I am authorized to present to the Medical Association of Georgia a gavel which has been made from the newel post which stood at the base of the stairs at Dr. Long's old home in Athens. I dug the post up out of the cellar some time ago, and found a post covered with many layers of white paint. After scraping all the paint off the workman said that the post was one of the most beautiful pieces of mahogany that he had ever seen. It seems fitting to present this today, inasmuch as our distinguished guest, Dr. deSchweinitz, comes from the University of Pennsylvania, the alma mater of Dr. Crawford W. Long, where he graduated in 1839.

I also wish to correct an error in the history we have, which states that Dr. Long was a charter member of this Association. His daughter says that he was not a charter member. The Association was organized in 1849 and he attended that meeting, but there is no record of his membership until he joined the Association in 1853, seventy-five years ago, when the meeting was held in Savannah. At that time he presented his paper announcing the discovery of anesthesia before the Association of Georgia.

I give this gavel to the Association in the name of these two dear old ladies, with their love and best wishes, and in the memory of their distinguished father.

The President: In the name of the Medical Association of Georgia I shall accept this gavel with appreciation of the loving thought which prompted the gift. I think Dr. Crawford W. Long gave to humanity one of the greatest blessings we have. It seems char-

aeteristic of the family that they still give. I will ask you, Dr. Boland, to convey our sincere thanks to the daughters of Dr. Long.

Address of Welcome: Honorable Thomas M. Hoynes, Mayor of Savannah.

Mr. Chairman, Ladies and Gentlemen: It is always a pleasure for me to address a body of men who, like you, are looking for better things, studying for the future, making yourselves more efficient. You know the word efficiency is often misused, especially in business, and this reminds me of a story. It seems there was a man who had everything in connection with his business regulated in a very efficient manner, but who found things not running so well at home, and he called on his pastor to tell him the trouble. He told him that things were not running at home as efficiently as they should be. The old man looked at him and asked him what he thought was the trouble. The man said he didn't know. His pastor said, "When your wife's birthday comes around I suppose you always remember it and give her a suitable gift?" "No," said the man. "Of course you always remember her at Christmas?" "No." "Well, then, you certainly must send her flowers for Easter, and remember your wedding anniversary each year, don't you?" Again the man said, "No, I haven't done that either." "Well, brother, it isn't hard to find the cause for the dissatisfaction you tell me of, just think it over." The man left and went straight to a jewelry store, where he selected a lovely piece of jewelry. He then went to the florist's and selected a large box of flowers, stopped at the confectioners, and got a box of candy, and proudly went home and presented them to his wife, expecting to have them received with smiles and evidence of affection. To his great surprise she burst out in tears, and to his anxious questioning as to the cause she said, "Oh, George, this is just the last straw. I have had a terrible day, the stove wouldn't work, the pipe in the bath room burst, and everything was flooded upstairs, my mother telegraphed that she was coming to visit us, the teacher sent Johnny home this afternoon with the chicken-pox, so we will have to be quarantined, and now you come home drunk!" (Laughter).

We are living in a fast age, an efficient age, with automobiles traveling fifty to sixty miles an hour, and air planes a hundred and fifty miles an hour. The old doctor will go, the true and honest old doctor. The old salesman, who was probably not half as well equipped or honest, has seen his day. The man today who has not the proper ethics will not last long and ten years from now will

not be in it at all. I think this organization meeting here today is for the purpose of building up the ethics of your profession, of making better men in the profession, and continuing the good work you and I are doing, or trying to do, in the community. Efficiency means the men who are doing good work, building up the community in which they live, and in your profession the men who know more about the private affairs of a man's home than any other person, and yet who never violate that confidence. You have great responsibility and the coming years will increase it, because we are living in a fast age.

I hope you will get much out of your meetings, and that you will enjoy every minute of your stay in Savannah. As I tell all Conventions that meet here, if some of your members should get into trouble, just call me. I will try to get them out, and if I can't, I will go with them.

Dr. G. H. Lang, President, Georgia Medical Society, Savannah:

Mr. President, Gentlemen of the Medical Association of Georgia, and Guests: It is an honor, a pleasure and a privilege for me, as President of the local Georgia Medical Society to welcome you as our guests. We have been looking forward for several months with a great deal of pleasant anticipation to the coming of this event. I do not know how many times during the past seventy-nine years you have similarly honored us, but I still have very pleasant recollections of the most recent meeting held by this Association here some five years ago. That was a meeting very well worth while and I am sure all of those who are here now will bear me out in this statement. The scientific program was good and I think everybody had a pretty good time. It looks as though this was going to be a much better meeting—I hope so. Your program committee has arranged a splendid program, one which covers almost everything in the field of medicine, surgery and the specialties, and one which should prove a real inspiration to all of us. Added to that, we have the great honor of having with us Dr. George E. deSchweinitz of Philadelphia, who is to address us today, so we are going to be pretty well taken up with things intellectual. In order that you may not feel that you will grow weary in well doing, we as hosts have prepared a diversion or two which we trust you will enjoy. I should like to tell you a few things about Savannah—some of you know us pretty well, others not so well, but we hope to get better acquainted before the meeting is over. I might tell you a few things about

the Georgia Medical Society, or regale you with a description of the joys and pleasures that await you at the nearby beach and river resorts, but I realize the time is too limited for that for there is much to be done. Suffice it to say that each and every one of the eighty-odd members of the Georgia Medical Society is as happy as I to have you as our guests. We honestly hope that you will enjoy every minute of your stay, and that you will go home carrying with you delightful memories of the Seventy-ninth Annual Session. We want it to be the best session you have ever attended in this or any other city. On behalf of the Georgia Medical Society, I again say—welcome.

Dr. Eugene E. Murphey, Augusta: Mr. President, Ladies and Gentlemen:

About every fifth year it is the privilege of the Medical Association of Georgia to come to Savannah as its guest.

Those of us who wear, however reluctantly, the silver crown and the cognomen of "The Old Guard," know what it means to come to Savannah. Each time our appreciation increases, each time the fulfillment of our joy is more complete. To the young man who comes to Savannah, there are many things that are worthy of his thought and attention whether he comes as a guest, as we come now, whether quietly as a pilgrim, or in whatever capacity, if he would learn what Georgia means to Georgians, here is the very fount of all of Georgia's history.

If one comes as a member of a medical body such as this, he should pause and realize, that here began organized medicine in Georgia, so long ago, that they even called their local organization the Georgia Medical Society, because, outside of Chatham County there was neither medicine nor Society in all the length and breadth of the State.

If one is historically minded, he should pause and remember again, that if it had not been for the buffer settlement at Savannah, this Atlantic seaboard might well have been Spanish from the tip of Florida to the Virginia capes, and what that might have meant to our America can not now be determined, nor should he forget that from this very spot went out the expedition which terminated the ambitions of Spain, at the glorious victory of Bloody Marsh.

If one comes here with a religious mind and tendency, surely it must mean much to him to recall the fact, that if John Wesley had not stepped ashore at this point, and set the very moss upon the live oaks of Yamacraw Bluff aflame with his burning zeal, there would have been no Methodists in Georgia, no Methodist Episcopal Church South, and

no Emory College nestling in peace among the Piedmont Hills.

If one comes believing that education constitutes a panacea for all the problems of life and all the ills which afflict the body politic, he should not forget that Savannah had a fine and flourishing library when Mr. Andrew Carnegie, the reputed Father of all Georgia libraries, was a young and canny Scotsman, thumping his telegraph keys in Pennsylvania.

If one believes that culture is impossible without a knowledge of foreign literature and foreign tongues, it may interest him to know that Savannah had the fortitude to invite Edmund Brieux to come to Savannah to lecture in his native tongue, at the time when the majority of our compatriots still believed that Brieux was something to eat, and that its citizens were reading "Damaged Goods," when most of us believed that such a title could only refer to a fire sale on Main Street.

If one values his Anglo-Saxon heritage and harks back, proudly, to an English and Colonial ancestry, it would be well worth while to make a pilgrimage to the spot beneath the immemorial oaks where reposes the sacred dust of Josiah Tattnall, who in word and in deed held before us the fact that "blood is thicker than water."

If one holds that the chivalry and the punctilio of the Old South was a definite influence for civilization, he should realize that nowhere did it rise to a finer flower or a more rigorous enactment, than in this old city whose paving stones echoed so often, in days gone by, to the footsteps of young men on the way to the Field of Honor, to jeopardize and to sacrifice if necessary, their lives in the upholding of a code of personal dignity and conduct which has never been surpassed.

If one comes only as a gourmet, the shrimp, the crab, and the terrapin, the teeming ocean's store of dainties, the game from rice field, swamp and marsh, so freely offered and so wonderfully served, must inevitably make him thank a wise and merciful God, that He has seen fit to adorn our inner economy with a hollow viscus, which clamors thrice daily for its pabulum.

In fact, we come back to Savannah largely as when little children we used to go avisting grandma. Here is the same atmosphere of age, and ease, and state, and charm, here are warm arms to enfold us, here are legends to stir our imaginations and to enlighten our brain, and food—such food!

Speaking seriously, one must feel that the spirit of a great and glorious past, hovers around us here. One must feel that whatever our future may be, promising though it

is, that from these very shores came the inspiration which made Georgia the State it is today, and will continue to make it the State it will become, and when we leave you, as we always leave you—reluctantly, and set our faces to the sunset—because all roads from Savannah lead West—, let us carry in our minds and hearts the knowledge that any people who had the sense of values, and the poetry in their souls to preserve as Savannahians have done, their ancient landmarks and the memorials of their past, and with such rare felicity to have named the last resting place of their loved ones "Le Bonaventure," have learned a lesson which they may teach to all of us. (Prolonged applause).

REPORT FROM COMMITTEE ON ARRANGEMENTS

Dr. W. R. Dancy, Chairman, announced the arrangements that had been made for the entertainment of the members of the Association, their wives and friends, and on behalf of the local society expressed his thanks and appreciation of the gracious remarks of Dr. Murphey.

SCIENTIFIC PROGRAM

Dr. T. F. Abercrombie, Atlanta, read a paper entitled, "Georgia's Health Problems." Discussed by Drs. V. H. Bassett, Savannah; Paul Eaton, Augusta; W. F. Maxey, U. S. P. H. S., and in closing by Dr. Abercrombie.

Dr. J. A. Redfearn, Albany, read a paper entitled "Tularemia." Discussed by Drs. M. F. Winchester, (discussion read by Dr. J. P. Bowdoin), Atlanta; W. R. Dancy, Savannah; A. R. Rozar, Macon; Francis B. Blackmar, Columbus; Sidney F. Bray, Savannah, and in closing by Dr. Redfearn.

Dr. Charles E. Dowman read a paper entitled, "The Importance of Eye Examinations in the Diagnosis of Intracranial Lesions." Discussed by Drs. B. H. Minchew, Waycross; J. Calvin Weaver, Atlanta; L. M. Gaines, Atlanta, and in closing by Dr. Dowman.

The President: Before taking up the next number on our program I think it fair to mention that we consider the Abner Wellborn Calhoun Lectureship as something very helpful for this Association, and it is only fair that we give credit to those to whom we owe special praise and thanks for this arrangement. I wish to mention particularly the names of Dr. Paullin and Dr. Boland, of Atlanta, who have done much to further this movement. The introduction of our guest today is in the hands of Dr. Paullin, whom you all know.

Dr. James E. Paullin: Mr. President, Distinguished Guest, Ladies and Gentlemen: At a meeting of the State Medical Association several years ago, Dr. Boland, in his presi-

dential address, suggested certain things whereby the meetings of this Association might be improved. As a result of his suggestion, some of the members conceived the idea of the organization of the Abner Wellborn Calhoun Lectureship Foundation. This Foundation is supported by voluntary contributions from members of the Association, and friends of Dr. Calhoun, who are interested in seeing the name of this worthy man, this distinguished member of our Association and its former president, perpetuated in order that we may have the privilege each year of having some distinguished man appear as the Abner Wellborn Calhoun lecturer before this Association. It is particularly fitting that on this occasion we have the great pleasure of having with us a former associate and friend of Dr. Calhoun's, one of the most distinguished men in the medical profession of today, Dr. de Schweinitz,—for twenty-two years Professor of Ophthalmology in the University of Pennsylvania; at present Professor of Ophthalmology at the Graduate School of the University of Pennsylvania; member Board of Trustees of the University of Pennsylvania; Chairman of the Board of Medical Affairs of the University; the recipient of Honorary degrees from many universities, including Michigan, Harvard, and the University of Pennsylvania; Honorary Member of the French Ophthalmological Society and the Ophthalmological Society of The United Kingdom; the first American to deliver the Bowman lecture, in 1923; an ex-president of the American Ophthalmological Society and of the American Medical Association; Brigadier General U. S. Medical Reserve Corps; author of the most popular text book on Ophthalmology in the English language, and above all, one of the most beloved men in the medical profession, who is interested in students, a most devoted disciple of Aesculapius, with a heart of gold, and the consciousness that through his efforts and scientific contributions medicine has advanced. It is with great pleasure that I present to you Dr. George E. de Schweinitz, the first lecturer of the Abner Wellborn Calhoun Lectureship Foundation, who will talk to us—"Concerning Headaches, Being an Essay on Certain Etiological Factors and on So-Called Distinctive Features and Their Mimicries."

Dr. de Schweinitz: Mr. President, Members of the Association, Ladies and Gentlemen: I am really overwhelmed by this more than kind introduction by my distinguished friend, and only wish I were worthy a fraction of the pleasant things he has said. It is always pleasant to be among my professional confreres, and particularly pleasant to be in

the Southland, where your hospitality is like the heart which always smiles.

An invitation to take part in the sessions of the Medical Society of the State of Georgia is a welcome honor, twice welcome in that it includes participation in the exercises which pertain to the foundation of the Abner W. Calhoun Lectureship. For these distinctions I return my best thanks and express my high appreciation.

It is altogether fitting and proper that the memory of Dr. Abner W. Calhoun should be enshrined in this Foundation. His achievements as citizen, soldier, physician, and teacher constitute a distinguished chapter in the chronicles of the history of this great state, adding luster to the records of many other notable accomplishments of which you are justly proud.

Fortunate in his parentage and the guidance thus bestowed, the register of the events of his life portrays the unfolding and development of his sterling character and his resolve "to do the work in hand with scrupulous and unaffected dignity, freely and justly."

Introduced by his father to the study of medicine, he matriculated in the Jefferson Medical College of Philadelphia, and was graduated, the honor man of his class, well-nigh sixty years ago.

Especially interested in the study of anatomy in his student days, he continued that interest when he went abroad shortly after his graduation. Attracted by the eminence of Hertel, he spent all available hours in his dissecting room, where, indeed, for a time he was his prosecutor. During this period he was offered the chair of anatomy in the Atlanta Medical College.

How better could he have laid the foundation for his future career as a notable exponent of one department of special surgery, wherein he was destined to attain a prominent place, than by acquiring proficiency in this important fundamental branch of the medical sciences.

Doubtless influenced by his father, he realized the necessity of gaining specialized knowledge and experience in ophthalmology and otolaryngology, and with characteristic energy and ambition sought and obtained instruction in the clinics of the masters of those days in these departments of medical and surgical work.

Fully and admirably equipped, he returned to his own home, and was elected professor of ophthalmology and otolaryngology in the Atlanta Medical College, of which his father had been one of the founders. He continued

with praiseworthy ability to fulfill the duties of this distinguished post until the day of his death, serving not alone as teacher, but as administrator, and in all the ways he was able admirably striving for its development and improvement.

His success was immediate, and there gathered about him an extensive clientele, the most extensive this Southland has ever known. From far and wide his patients came seeking the help of his clinical and of his operative skill, and no one, rich or poor, sought this benefit in vain.

His commanding presence, his distinguished personality, his utter friendliness, his high ideals, his balanced judgment, his untiring energy, his manual dexterity—these were the assets of this gifted man, spent with fine liberality for the advantage of his adoring patients and of his admiring students.

His was the hand which restored to countless hundreds the priceless heritage of sight. He lived his life abundantly. Of him it may be said, as it has been of another great physician, "the very name of him was Victory."

Deeply concerned with the obligations and responsibilities of medical and surgical practice, he none the less found time to accept and faithfully to perform the duties which pertain to organized medicine, to teach to the eminent satisfaction of his students, to contribute liberally and efficiently to the literature of the Department of Medicine and Surgery he so well adorned, to engage effectively in public affairs, to be an outstanding citizen imbued with the spirit of civic righteousness and of business rectitude.

He was a great physician and a great gentleman. He belonged to that rare group of men who find hidden joy in every perfect service, and who give fine example of the conduct of the higher life.

In my early days, long ago, it was my privilege to visit Dr. Calhoun. This was a happy circumstance in my life. The impressions then gained have never faded. I am honored in the opportunity of paying this tribute, albeit inadequately framed and spoken. But I pay it reverently, and in that reverence I know you join.

I quote some recently published lines, somewhat altered in their relations, and yet appropriate:

And when he walked, his was the stride of
one

Who lives a tireless servant of his land.
He knew that land and held its honor high.

There was no cedar tree in all his wood
more finely straight than he.
He can not be forgotten by his own.

(Dr. de Schweinitz then presented his paper.)

The President announced that the Georgia Pediatric Club would have its usual annual meeting at the De Soto Hotel at 8:00 p.m., and that there would be a clinic by Dr. de Schweinitz for the ophthalmologists at 3:00 p.m.

The Secretary: There will be two alumni dinners this evening, the University of Georgia and Emory University, and these organizations invite all those who are not alumni of these special institutions to be present. Tickets may be procured at the registration desk for whichever dinner you may prefer. Immediately after adjournment this morning we wish to have a picture made of the entire group.

The President: I am pleased to announce that we have as a guest on this occasion Dr. G. V. L. Brown, of Milwaukee, Wisconsin, who is one of the speakers of the Inter-State Post-Graduate Medical Association of North America, and before our final adjournment Dr. Brown will give us an address on "Plastic Surgery."

As this completed the program for the morning, on motion duly seconded and carried the Association adjourned at 1:20 to reconvene at 2:30 p.m.

FIRST DAY—AFTERNOON MEETING

The Association reconvened and was called to order at 2:45 p.m., by the President, Dr. William A. Mulherin, Augusta.

CLINICAL PROGRAM

Dr. W. B. Crawford, Savannah, gave a clinic on surgical diseases (suppurative osteomyelitis following a bullet wound; lung abscesses).

Dr. Frank K. Boland, Atlanta, gave a clinic on surgical conditions and presented a patient with bilithorax and one with cholangitis; also a boy who had sustained a fracture of both bones of his right leg, when three years of age.

Dr. C. C. Harrold, Macon, gave a clinic on cancer of the breast.

Dr. Eugene E. Murphey, Augusta, gave a clinic on heart disease.

Dr. A. J. Waring, Savannah, gave a clinic on care of the premature baby.

Dr. W. H. Myers, Savannah, gave a clinic on gynecological conditions.

Dr. Lee Howard, Savannah, gave a clinic on pathology.

Dr. S. Elsom Bray, Savannah, gave a clinic on skin diseases.

The President: Before we adjourn I wish to read a telegram that has just been received.

"Dr. W. A. Mulherin, President, Medical Association of Georgia. I am indeed happy to convey the best wishes of the Women's Auxiliary to the American Medical Association for a happy and successful meeting, and its sincere thanks for the many courtesies and the understanding helpfulness which it has received from you personally and other members of the Association.

Please accept my personal sincere and affectionate greetings to a most noble group of men, one with few equals, and no peers.

(Signed) MRS. ALLEN H. BUNCE, Pres. Elect, Auxiliary American Medical Association."

I would like to hear a motion authorizing your President to write Mrs. Bunce and thank her for her message.

Dr. Marion C. Pruitt, Atlanta: I move you, Mr. President, that we send Mrs. Bunce a telegram and tell her how much we miss her. She is as much a member of our Association as any of us, and has attended almost as many meetings as Dr. Bunce. Her health has not been very good recently. I am sure this Association does not appreciate how much work Mrs. Bunce has put into the Women's Auxiliary of our organization, but I am not sure that her present condition of health is not due to her untiring work in this field. I think we should convey to Mrs. Bunce our very sincere and profound thanks for her message.

Motion seconded and unanimously carried.

The President again announced the alumni dinners and on motion, regularly seconded and carried, the Association adjourned at 5:30 to reconvene at 8:00 p.m.

FIRST DAY—EVENING MEETING

The Association reconvened and was called to order at 8:10 by the President, Dr. W. A. Mulherin, Augusta.

Dr. E. F. Wahl, Thomasville, read a paper entitled, "Pulmonary Aspergillosis." Discussed by Drs. V. P. Sydenstricker, Augusta; Hal M. Davison, Atlanta; E. C. Thrash, Atlanta; Theodore Toepel, Atlanta; and in closing by Dr. Wahl.

Dr. Everett L. Bishop, Atlanta, read a paper entitled, "The Prognosis of Tumors with Special Reference to Cell Type and Its Influence on Treatment." Discussed by Drs. S. E. Bray, Savannah; Lee Howard, Savannah; E. C. Thrash, Atlanta; Ralph H. Chaney, Augusta; and in closing by Dr. Bishop.

Dr. Stewart R. Roberts, Atlanta, read a paper entitled, "Mucous Colitis." Discussed by Drs. William R. Houston, Augusta; Roger C. Swint, Milledgeville; Carl C. Aven, Atlanta; C. W. Roberts, Atlanta; Paul Eaton, Augusta; and in closing by Dr. Roberts.

Dr. W. E. Person, Atlanta, read a paper entitled, "Complete Prolapse of the Rectum." Discussed by Drs. W. A. Selman, Atlanta; and in closing by Dr. Person.

Dr. Lawson Thornton, Atlanta, read a paper entitled, "A Procedure for Accurate Reduction of Supracondylar Fractures of the Humerus." (Motion pictures and lantern slides). Discussed by Drs. Kenneth McNlough, Waycross; Grady N. Coker, Canton; Theodore Toepel, Atlanta; Robert L. Rhodes, Augusta; Robert Drane, Savannah; and in closing by Dr. Thornton.

The President: I am highly gratified with our program. The papers have all been carefully prepared, of a high scientific order, ably presented, and our program so far as it has gone, is of as high a type as one will find at the meeting of the American Medical Association or the Southern Medical Association. I think it my duty to call attention to this and to thank our scientific committee.

I wish again to call attention to the meeting of the Pediatric Club, which is now in session, and to invite all those interested to attend.

On motion the meeting was declared adjourned at 11:00 p.m.

THURSDAY, MAY 10, 1928

SECOND DAY—MORNING MEETING

The Association reconvened and was called to order at 9:05 by the President, Dr. William A. Mulherin, Augusta.

Dr. E. C. McCurdy, Shellman, read a paper entitled, "A Better Medical Society." Discussed by Drs. G. Y. Moore, Cuthbert; J. O. Elrod, Forsyth; C. L. Ayers, Toccoa; Theodore Toepel, Atlanta; Allen H. Bunce, Atlanta; and in closing by Dr. McCurdy.

Dr. Montague Boyd, Atlanta, read a paper entitled, "Urinary Antiseptics." Discussed by Drs. W. F. Reavis, Waycross; Frank K. Boland, Atlanta; J. P. Bowdoin, Atlanta; Cleveland W. Findley, Vidalia; H. Y. Righton, Savannah; Earl H. Floyd, Atlanta; and in closing by Dr. Boyd.

Dr. J. R. McCord, Atlanta, read a paper entitled, "What Is Needed to Improve the Practice of Obstetrics." Discussed by Drs. C. K. Sharp, Arlington; A. J. Mooney, Statesboro; J. P. Bowdoin, Atlanta; Charles B. Upshaw, Atlanta; W. Frank Wells, Atlanta; Edward C. Demmond, Savannah.

Dr. W. P. Harbin, Rome, read a paper entitled, "Medical Economics." Discussed by Drs. Theodore Toepel, Atlanta; J. O. Elrod, Forsyth; E. C. McCurdy, Shellman; Thomas E. Rogers, Macon; and in closing by Dr. Harbin.

Dr. W. E. McCurry, Hartwell, read a paper entitled, "The Home Management of Diabetes Mellitus." Discussed by Drs. H. M. Bowcock, Atlanta; H. I. Reynolds, Athens; John W. Daniel, Savannah; Thomas E. Rogers, Macon; and in closing by Dr. McCurry.

The President declared a recess of five minutes before the presentation of the presidential address, the Association being called to order at the end of this time by Vice-President H. M. Fullilove, Athens.

Dr. Mulherin then delivered his address, entitled, "Modern Medicine." In accordance with custom this address was not thrown open to discussion.

The President then resumed the Chair, and granted the privilege of the floor to Dr. Boland, who called attention to the commercial and scientific exhibits, particularly to that of the Steiner Clinic which won first prize at the meeting of the Southern Medical Association.

Dr. Boland moved that the President appoint a committee of five to visit the exhibits officially, to let the exhibitors know that the Association recognized and appreciated their appearance.

Motion seconded and unanimously carried.

The President appointed Drs. R. L. Miller, Frank K. Boland, C. K. Sharp, C. W. Roberts, and Hugh N. Page, to serve as a committee for this purpose.

Dr. J. P. Bowdoin extended an invitation to all members of the Association to attend the clinics to be given by the State Board of Health at Emory University, beginning June 4th.

Secretary Bunce called attention to a luncheon to be given by the alumni of the University of Maryland at 1:30 p.m., and read the following telegrams:

"Medical Association of Georgia,

Care Dr. A. H. Bunce, Secretary,

De Soto Hotel, Savannah.

The Iowa State Medical Society in Seventy-seventh Annual Session convened sends felicitations to the Medical Association of Georgia, and best wishes for a successful and profitable meeting.

(Signed) TOM B. THROCKMORTON, Sec.

"Dr. Allen H. Bunce,

De Soto Hotel, Savannah, Georgia.

Care Medical Association of Georgia,

On account of urgent and important matters regret I can not attend Association, stop. Please extend my greetings and good will stop. I congratulate the medical profession for all that they are doing for prevention of disease in our state, making more efficient citizenship by their scientific and practical works stop. I wish further to commend to

the Association the splendid work being done by the State Department of Health stop. In two weeks there will be completed by far the most desirable quarters for laboratory and scientific work the State has ever had.

(Signed) L. G. HARDMAN, Governor."

Dr. Bunce moved that a telegram be sent to each of these gentlemen, thanking them for their courtesy.

Motion seconded by Dr. Elrod and unanimously carried.

Dr. G. V. I. Brown, Milwaukee, Wisconsin, addressed the Association on, "Plastic Surgery," with lantern slides.

Secretary Bunce moved a rising vote of thanks to Dr. Brown for his splendid presentation. Motion seconded and unanimously carried.

The President announced that the one remaining paper on the morning's program would become the first order of business at the afternoon meeting, and declared the meeting adjourned at 1:00 to reconvene at 2:30 p.m.

SECOND DAY—AFTERNOON MEETING

The Association reconvened and was called to order at 2:40 p.m. by the President, Dr. William A. Mulherin.

The President: We are fortunate in having with us a fraternal delegate from the Tennessee State Medical Association. I wish to extend the privilege of the floor to this delegate, and to tell him how glad we are to have him with us today. We shall be happy to have a few words from Dr. Ernest W. Patton, of Chattanooga, Tennessee.

Dr. Patton: It is a pleasure for me to be here as a delegate from the Tennessee State Medical Association. I was not told whether to talk or not to, but I think they believed I had sense enough not to. I had hoped that I might meet with your House of Delegates, for the purpose of bringing up a little matter. Some of us have felt that the profession was not doing its whole duty to the laity, that we are lacking in that we have not allowed the laity to keep up with us in matters of medical education. You know how many of the newspapers are carrying articles by doctors all over the country. Newspaper men tell us that these articles are eagerly sought by the laity, and that we are derelict if we do not take part in them. At our last meeting we adopted a measure that has been used successfully by Wisconsin for two years. The Secretary is empowered to ask any man he may wish to write articles on popular lay topics; then a lay editor is given an opportunity to put this information in language that can be understood by the lay public, and it is then returned to the Secretary so

that he may see that the meaning has not been lost in the editing. No man's name is connected with it, and there is no chance of any one using it as propaganda. It all comes from the State Association, and we feel that it will be a wonderful help. It is certain that if this is not done by reputable physicians, men who do not have a high sense of medical ethics, and perhaps small knowledge of medical matters will, for the price paid, write articles for the publications. I have been told that a man in New York recently turned down an offer of \$2500.00 for a single article for the American Magazine. I hope the State of Georgia and others will adopt a similar plan for it has worked successfully in Wisconsin and we are going to try it out. It is not an expense to the association, the only expense is to the lay editor, and is a small item.

Again I wish to say how glad I am to be here, and to extend greetings from the Tennessee State Medical Association.

Secretary Bunce moved that this matter be referred to the Committee on Health and Public Instruction, with a request that they bring in a report on it at the meeting of the House of Delegates on Friday morning.

Motion seconded and unanimously carried.

The President: I have just learned that Dr. John Kenneth Hutcherson of Louisville, Kentucky, is attending our meeting, and we would be delighted to have a few words from him at this time.

Dr. Hutcherson: I appreciate your courtesy very much, but I have no desire to intrude. I have enjoyed the papers that have been discussed and am very happy to be here. Some two or three years ago I was in the South and since then have had a desire to attend a meeting of one of the Medical Societies of the Southern States. When I saw in the Southern Medical Journal that this meeting was to be held at this time, I immediately made preparations to get away from home. I think an adage that is often given to young men is good and will help them out if they will "Stop, look, listen and learn."

Dr. Dancy extended an invitation to Dr. Patton and Dr. Hutcherson to attend the banquet and entertainment in the evening.

Dr. R. L. Miller reported that the Committee appointed to visit the exhibits had carried out the instructions of the President, and that the gentleman in charge seemed to appreciate the attention shown them by the Association.

The President thanked the Committee for their work and the following program was then carried out:

Dr. Glenville Giddings, Atlanta, read a paper entitled, "The Treatment of the Anemias

with Liver Fraction." Discussed by Drs. John W. Daniel, Savannah; W. R. Dancy, Savannah; Everett L. Bishop, Atlanta; and in closing by Dr. Giddings.

Dr. A. R. Rozar, Macon, read a paper entitled, "Congenital Hypertrophic Stenosis of the Pylorus." Discussed by Drs. C. W. Roberts, Atlanta; O. H. Weaver, Macon; Charles Usher, Savannah; Robert L. Rhodes, Augusta; Lawrence Lee, Savannah; and in closing by Dr. Rozar.

Dr. W. A. Selman, Atlanta, read a paper entitled, "Intussusception." Discussed by Drs. Cleveland Thompson, Millen; Charles Usher, Savannah; Miller T. Harrison, Atlanta; O. H. Weaver, Macon; Floyd W. McRae, Atlanta; Loren Gary, Georgetown; and in closing by Dr. Selman.

Dr. Benjamin Bashinski, Macon, read a paper entitled "Infantile Eczema—Some of the Causes and Treatment." Discussed by Drs. S. P. Norman, Columbus; Hal M. Davison, Atlanta; and in closing by Dr. Bashinski.

The President: The Medical Association of Georgia is very fortunate in its selection of another guest this year. Our guest on this occasion is a pediatrician of national and international reputation and ability. I know of no pediatrician who has done more constructive and worth while work for pediatrics than our honored guest today. I refer to his excellent work, when everything was running wild, with regard to the ultrascientific feeding of babies. It was Dr. Clifford G. Grulee, in his valuable book on "Infant Feeding" who stemmed the tide and led us back to the sane feeding of babies. His book entitled, "The Newborn" was also a valuable contribution. Dr. Grulee is Clinical Professor and Head of the Department of Pediatrics, Rush Medical College of the University of Chicago. He is also editor of the American Journal of Diseases of Children, the most highly scientific journal printed today on pediatrics. He has received many honors, but I will not burden you with all of them. Suffice it to say that with all of this he is very human, as a majority of you men who have met him will testify, and I think this is a very true manifestation of greatness. I take great pleasure in presenting Dr. Grulee.

Dr. Grulee: In the long list of things that Dr. Mulherin mentioned he left out the fact that I have for long years been a friend of William Mulherin, who has recently been elected a member of the American Pediatric Society.

Let me also say that for many years I traveled the trails of the Rocky Mountain with one of your members, and it has been a source of great sadness to me that he is not

here to greet me. I think I cared as much for George White as any of you here, and it is a great disappointment that he is not here, for he often invited me to visit him in Savannah.

Dr. Grulee then addressed the Association on "Bone Lesions in Children."

Secretary Bunce moved that a rising vote of thanks be extended to Dr. Grulee for his splendid presentation.

Motion seconded and unanimously carried.

Dr. George F. Klugh, Atlanta, read a paper entitled, "Basal Metabolism in Normal Children from Six to Twelve Years of Age." Discussed by Drs. Joseph Yampolsky, Atlanta; Charles E. Waits, Atlanta; and in closing by Dr. Klugh.

Dr. Robert E. McGill, Montezuma, read a paper entitled, "Complications Sometimes Overlooked in Diseases of Children." Discussed by Dr. George F. Klugh, Atlanta, and in closing by Dr. McGill.

Dr. Thomas Bolling Gay, Atlanta, read a paper entitled, "Routine Circumcision at Birth." Discussed by Drs. Clarence L. Ayers, Tooeva; Waldo E. Floyd, Statesboro; and in closing by Dr. Gay.

Dr. Boland: Before we adjourn, I wish to say that this Association has always stood at the top of the list among the members of the Southern Medical Association. I am sure we have no Association anywhere which is doing more to advance the science of medicine than is the Southern Medical Association. Mr. Loran is with us, and also his secretary, to take memberships to the Association and I would like to see every member of the Medical Association of Georgia become a member of the Southern Medical Association. The meeting this year will take place at Asheville, North Carolina, in the middle of November, and I hope you will all plan to attend this meeting.

Mr. C. P. Loran: I did not expect to be called upon, but it is a great pleasure to bring you greetings from the central office of the Southern Medical Association. I have enjoyed being here, but as I am not the talking end of the Association, I wish only to say that I hope you will give us your support and that you will attend the meeting in November Georgia has always come strong, and I hope to see many of you there.

President Mulherin endorsed the remarks of Dr. Boland and Mr. Loran, announced that the banquet would be informal, and declared the meeting adjourned at 6:45 p.m.

The Annual Banquets of the Medical Association of Georgia and of the Ladies' Auxiliary were held on Thursday evening at the De Soto Hotel. At the banquet of the Asso-

ciation Dr. W. R. Dancy was Toastmaster. The Crawford W. Long prize was presented to Dr. M. Hines Roberts, Atlanta, by Dr. William R. Dancy, and the "Badge of Service" was presented to the President by Dr. R. L. Miller. Entertainment and dancing were supplied by the Women's Auxiliary.

FRIDAY, MAY 11, 1928

THIRD DAY—MORNING MEETING

The Association reconvened and was called to order at 9:20 by the President, Dr. William A. Mulherin, Augusta.

Dr. Bunce presented an abstracted report of the meetings of the House of Delegates. (Cf. Minutes House of Delegates.)

Dr. R. L. Miller moved the adoption of the report as given.

Motion seconded and unanimously carried.

Dr. William C. Warren, Jr., Atlanta, read a paper entitled, "Chronic Infection of the Maxillary Sinuses and Its Relation to General Medicine." Discussed by Drs. W. H. Cabaniss, Athens; Francis B. Blackmar, Columbus; and in closing by Dr. Warren.

The President: We are fortunate in having with us this morning Dr. Harold L. Warwick of Fort Worth, Texas, and we shall be glad to have a few words from him.

Dr. Warwick: It is a great pleasure to have an opportunity to present the compliments and felicitations of the Texas State Society to the Medical Association of Georgia. It was a very happy coincidence that I happened to drop in just at this time. I am a native Georgian, but have been absent from the state for twenty-five years. Every so often I feel that I must come back home, and I am happy to be here this morning and to have an opportunity to listen to the papers. I thank you all.

Dr. Francis B. Blackmar, Columbus, read a paper entitled, "New Phases of Treatment of Otitis Media." Discussed by Drs. George T. Olmstead, Savannah; Arthur G. Fort, Atlanta; Harold L. Warwick, Fort Worth, Texas; George Henry Faggart, Savannah; and in closing by Dr. Blackmar.

The President requested Vice-President H. M. Fullilove to take the Chair, and announced that the meeting of District Secretaries would take place at 11:00 a.m.

Dr. Murdock Euen, Atlanta, read a paper entitled, "Foreign Bodies in Food and Air Passages." Discussed by Drs. Julian F. Chisholm, Savannah; Bernard McIl. Cline, Atlanta; Thomas S. Clay, Savannah; Francis B. Blackmar, Columbus; Frank K. Boland, Atlanta; and in closing by Dr. Euen.

Dr. Hugh N. Page, Augusta, read a paper entitled, "The Surgical Treatment of Pulmonary Tuberculosis." Discussed by Drs.

E. C. Thrash, Atlanta; William B. Crawford, Savannah; Frank K. Boland, Atlanta; William J. Cranston, Augusta; and in closing by Dr. Page.

Drs. John F. Denton and Calvin B. Stewart, Atlanta, presented a paper entitled, "A Review of 228 Cases of Cancer of the Uterine Cervix." Discussed by Drs. Charles H. Richardson, Macon; C. R. Battey, Augusta; Ruper H. Fike, Atlanta; and in closing by Dr. Stewart.

The Chairman declared a recess of five minutes before proceeding to the election of officers, at the stated hour of 12:00 noon.

The Association was called to order at 12:00 o'clock by the President, Dr. William A. Mulherin, who called attention to the provision of the Constitution and By-laws governing the election and requested the Past Presidents who were present to come forward and act as tellers.

Drs. Frank K. Boland, J. O. Elrod, E. C. Thrash, J. M. Smith, V. O. Harvard and J. W. Palmer complied with this request.

The following officers were then balloted upon and declared duly elected:

President, Dr. C. K. Sharp, Arlington.

President-elect, Dr. William R. Dancy, Savannah.

First Vice-President, Dr. William E. McCurry, Hartwell.

Second Vice-President, Dr. M. Hines Roberts, Atlanta.

Parliamentarian, Dr. M. A. Clark, Macon.

Delegates to A. M. A., Dr. William H. Myers, Savannah; Dr. E. C. Thrash, Atlanta.

Delegate Alternates, Dr. William A. Mulherin, Augusta; Dr. C. W. Roberts, Atlanta.

Councilors—Fifth District, Dr. E. C. Thrash, Atlanta. Sixth District, Dr. M. M. Head, Zebulon. Eighth District, Dr. H. M. Fullilove, Athens.

SELECTION OF MEETING PLACE

An invitation was extended to the Association to meet in Macon in 1929, and upon motion of Dr. Elrod, regularly seconded and carried, this invitation was accepted.

The President requested Dr. Harvard and Dr. Elrod to escort Dr. Sharp to the platform, and Dr. Palmer and Dr. Thrash to escort Dr. Dancy.

Dr. Sharp: I wish to express my deep appreciation of the honor thus bestowed upon me. You must all help me bear the burden of the responsibilities which will occur. I feel that I need your sympathy, and can only express my appreciation.

Dr. Dancy: I feel very keenly and deeply the honor which you have conferred upon me. I know that it carries with it a great deal of responsibility, not this year but next, and I trust that I shall be able to measure up to

this responsibility so that you will feel that your trust has not been misplaced. I wish to tender my services to our distinguished President, Dr. Sharp, and to say that anything I may do during his administration to help him will not be done in any spirit whereby the lustre of his administration will be dimmed.

Dr. C. W. Roberts presented the following resolution:

Whereas, the Medical Association of Georgia, in annual session, has been the guest of the Georgia Medical Society and the delightful citizens of Savannah; and

Whereas, we have been the recipients of many courtesies so characteristic of this charming city, its big hearted medical brothers, and its alert citizenship; and

Whereas, the Medical Association of Georgia, existing in this city of blessed historic and civic renown, coupled with a program of unusual interest, has made it possible for us to enjoy one of the most successful reunions in the history of our Association, therefore, be it

Resolved: That we express our feeling of deep gratitude, first, to the organized medical profession of this community; then, to all the people of Savannah, including the public press and such other organizations as have so generously contributed to our happiness and the onward-going of our beloved Association. And be it further

Resolved: That we record our appreciation of the unique playlet given through the Ladies' Auxiliary of the Chatham County Society, as well as of the splendid scientific and commercial exhibits, which enriched the educational value of our session. That we record our special thanks to the Estes Surgical Instrument Company for the compliment conferred in furnishing the equipment necessary to the examination of applicants for physical rating under the plan fostered by the Committee on Health and Public Instruction. And be it further

Resolved: That the thanks of this Association be expressed to the Hotel De Soto for its excellent services, which have contributed so much to our comfort.

FRANK K. BOLAND,
C. W. ROBERTS,
Committee.

Because of the lateness of the hour the papers of Dr. Edgar R. Pund, Augusta, and Dr. Cosby Swanson, Atlanta, were read by title and submitted for publication.

On motion, regularly seconded and carried, the Association adjourned at 2:15 p.m. *sine die*.

ALLEN H. BUNCE,
Secretary.

PROCEEDINGS OF THE HOUSE OF DELEGATES OF THE MEDICAL ASSOCIATION OF GEORGIA

First Meeting

TUESDAY, MAY 8, 1928

The House of Delegates was called to order at the De Soto Hotel, Savannah, Georgia, at 2:30 P.M., by the President, Dr. William A. Mulherin, Augusta.

ROLL CALL

The Secretary stated that he held in his hand the signed roll of the following Delegates and Councilors and moved that this constitute the roll call for this meeting:

Cleveland Thompson, Jenkins County.

M. B. Allen, Jackson County.

C. F. Holton, Chatham County.

R. L. Miller, Burke County.

S. J. Lewis, Councilor 10th District.

E. C. Thrash, Councilor 5th District.

C. K. Sharp, Councilor 2nd District.

G. Lombard Kelly, Richmond County.

M. J. Egan, Chatham Co. (Ga. Med. Soc.)

C. W. Roberts, Delegate to A. M. A.

Charles E. Waits, Fulton County.

Marion T. Benson, Fulton County.

James N. Brawner, Fulton County.

C. L. Ayers, Councilor 9th District.

S. L. Vinson, Coffee County.

W. F. Reavis, Ware County.

C. C. Harrold, Bibb County.

W. C. Sims, Stewart-Webster.

Ralph H. Chaney, Richmond County.

W. A. Selman, Fulton County.

John W. Daniel, Ex-President, Savannah.

O. W. Roberts, Councilor 4th District.

Dan Y. Sage, Fulton County.

M. M. Head, Councilor 6th District.

G. Y. Moore, Councilor 3rd District.

Steve P. Kenyon, Terrell County.

President Mulherin and Secretary Bunce.

Dr. Bunce's motion was regularly seconded and carried, and President Mulherin declared the House duly constituted for the transaction of business.

The President: Before passing to the next order of business I would like to read to you a letter received from our Parliamentarian, Dr. M. A. Clark:

"May 3, 1928

Dear Mr. President:

Our only son is waging a hopeless fight against the King of Shadows and we can hardly expect the conflict to last much longer. We do our best but must stand by and see him fade away, and we must give him comfort and cheer until he is taken. My duty is here now and I must be faithful to duty though the heart breaks.

I shall think of you next week and wish you a most successful meeting of our Asso-

ciation. You will preside well and will not need the help of your Parliamentarian.

With sincere regards and very best wishes, I am,

Very truly yours,
(Sgd.) M. A. CLARK."

It is to be regretted that Dr. Clark cannot be with us, and especially that this sorrow has come upon him. The Chair would like to hear a motion that our Secretary be empowered to convey to Dr. Clark our love and profound sympathy in this trying ordeal of his.

Dr. Holton so moved. Motion seconded by Dr. Thrash and unanimously carried.

REPORTS OF OFFICERS

PRESIDENT'S REPORT

Dr. Mulherin: Members of the House of Delegates—Gentlemen: As President of the Medical Association of Georgia, I beg leave to submit the following report:

Permit me to extend to you and the members of the Medical Association of Georgia my deep gratitude for the high honor you have conferred upon me, and my sincere thanks for the loyal and generous support you have given me during my administration.

The presidency of the Medical Association of Georgia is not only an honorable office, but is likewise a pleasurable one. As your President it has been my good fortune to have attended the District meetings of our entire twelve districts, and my additional good luck to have been present a second time at the meetings of the First and Tenth Districts.

The privilege and pleasure of attending the Annual Meeting of the Georgia State Nurses' Association, held in Macon, was accorded me as your President. The honor was given me of filling a place on the evening program, which program was open to the public. I welcomed this opportunity, for I was anxious to encourage and foster a closer and more friendly relationship between the medical and nursing professions of Georgia. The two professions are inseparable, and more general good will come to the public and to both professions from co-operation than will result from antagonism and misunderstandings.

As your President, I accepted a kind invitation from the Emory Medical Alumni Association to attend its annual banquet, given in Atlanta. I assure you I had a most delightful time. The Medical Institute of Athens, sponsored by Clarke County Medical Society, Eighth District Medical Association and Child's Health Demonstration of the Commonwealth Fund, held a two days' meeting devoted to scientific papers and clinics.

It was a pleasure to attend this meeting and take an active part in their program.

Three weeks ago I attended the Annual Meeting of the South Carolina Medical Association in Columbia, S. C. I was entertained most royally by the members of the South Carolina Medical Association. An opportunity to speak before their Association was given to me and our fraternal delegate, Dr. Henry Middleton Michel. We were well received, and I believe some good will result from our visit.

There has arisen, during my administration, a serious question that deserves your earnest consideration. It is the question as to the advisability of increasing our annual dues from \$5.00 to \$10.00. How our Association can fulfill its obligations to the profession and to the public, with its medical activities necessarily increasing and its scope of usefulness yearly enlarging, without sufficient funds upon which to operate, is beyond my comprehension.

I am informed that the large majority of state medical associations in America have annual dues of \$10.00 or more. I will mention but one concrete example of embarrassment occasioned where funds were needed but were deficient: At the last session of the State Legislature your Committee on Public Policy and Legislation endeavored to have enacted the Basic Science Law. Opponents to the Bill had a generous supply of money and used it freely; your Committee worked like Trojans and made a glorious fight, but were handicapped by a lack of funds and were defeated. Dr. Charles E. Waits, Chairman of this Committee, deserves special praise and thanks from the Association for his excellent work on the Basic Science Law, and for his prompt and efficient services in conjunction with the American Medical Association on pending National medical legislation.

This question of increasing our dues will not come up for decision before this House of Delegates, for a change in our Constitution requires a year's notice before decisive action can be taken.

Regarding medical organization, I feel that medicine is well organized in Georgia and is daily growing stronger in its organization. There are only one or two districts in our State that are not well up to standard requirements, and under intelligent management and judicious encouragement I feel reasonably certain they will properly respond.

Your officers, councilors and committees have done excellent work during the year, and have discharged their duties in a most commendable manner. They are deserving of our praise and commendation. They have also

supported your President during his administration in a very pleasing and substantial way, for which support I gratefully offer my thanks. The home office, ably presided over by our Secretary-Treasurer and Editor of the Journal, Dr. Allen H. Bunce, and Mr. H. L. Rowe, our Business Manager, is conducted in a very efficient and business-like way. It is a credit to the Medical Association of Georgia, and is the very foundation of our efficiency and strong organization.

All of us have the highest regard for the professional and business ability of Dr. Allen H. Bunce, and we love him dearly, but there is a question in my mind as to whether we fully appreciate his actual worth to our organization. I must confess I did not properly evaluate his services until I became your President, and had an opportunity to study him at close range. What little I have been able to accomplish this year for the Association has been due mainly to the advice and assistance of Dr. Bunce. It has been his well-seasoned judgment in matters pertaining to our Association, his high code of ethics, his love for the Association, his firm belief that every member should be willing to make some sacrifice for the betterment of the Association, that has stimulated me to give to our Association the best of which I was capable.

During the past year this Association was most unfortunate in losing, by an untimely death, one of its most honored and valuable officers, the Chairman of the Council, Dr. Thomas C. Thompson of Vidalia. He was a man of ideal parts, an active and honest worker for everything that redounded to the credit of this Association. He gave to the Association generously of his time and talent, and he will be sadly missed by every member of the organization. His place will be hard to fill, and we will miss his valuable advice and kind personality. I will ask the House of Delegates, as a mark of profound respect and as a manifestation of its deep sympathy for his family, to rise and remain standing for ten seconds.

This year the House of Delegates will have some very important questions brought before it for consideration. Let me ask that you give serious consideration to them, and that you let your judgment as to what is best for your Association always actuate you in your final decision and vote.

I feel that the year has been successful and constructive for the Association. The credit for this is not due to your President, but should be given to your other officers, especially to your Secretary-Editor, the Councilors, Committeemen, and the active members of the Association, who this year have taken more interest than usual in Association af-

fairs. Among the achievements that might be classed as successful and constructive are: An increase in total membership; an increase in paid up membership; the creation and founding of the Abner Wellborn Calhoun Foundation; the organization of the Committee to write the medical history of Georgia; the successful work of the Fulton County Medical Society in securing the next meeting of the Interstate Post-Graduate Medical Association of North America, which will take place in Atlanta next October. Last, but not least, might be mentioned the fact that a better feeling of good fellowship and brotherly love exist in Georgia amongst physicians today than has prevailed for many years. This fact is very pleasing to me, and augurs well for the future well-being, growth and organization of our Association. I know of no firmer foundation upon which to build medical organizations than that of good fellowship and brotherly love.

Respectfully submitted,

WILLIAM A. MULHERIN,
President.

SECRETARY-TREASURER'S REPORT

Dr. Allen H. Bunce presented the following report:

REPORT OF SECRETARY-TREASURER

To the members of the House of Delegates of the Medical Association of Georgia: The following annual report of the Secretary-Treasurer is respectfully submitted to the House of Delegates:

Membership: The total paid membership of the Association on May 1, 1928, was fourteen hundred and one, as compared with fourteen hundred thirty-eight on the corresponding date of 1927, showing a decrease of thirty-seven members up to May 1. However, by persistent effort, since our last annual meeting a number of delinquent members have been induced to pay their dues and thus be reinstated in good standing. Our total membership for 1926 was seventeen hundred; whereas, the official report of the Secretary of the American Medical Association which has just been issued (Journal A. M. A., May 5, 1928), shows our total membership for 1927-1928 to be seventeen hundred and seventy-one. This is accounted for by the fact that our members for 1927 remained in good standing up to April 1, 1928. Consequently, our report to the A. M. A., which had to be in the office of the A. M. A. before April 1, included all members in good standing for 1927 as well as all the new members for 1928 up to the time of sending our report. We are especially pleased to report that, since January 1 of this year we have received one hun-

dred nineteen new members. We believe that this shows a healthy growth of our Association, especially in view of the fact that we now have three hundred thirty-nine fewer physicians in Georgia than five years ago—1923.

Constituent Societies: On May 1, 1928, we had received reports from ninety-five constituent societies. This corresponds exactly to the number from whom we had received reports on May 1 of last year. However, since the last annual meeting ten more societies have reported which enabled us to report one hundred five organized component societies for our annual report covering 1927-1928. We respectfully request that every effort be made to induce these delinquent societies to send in their reports so that their members may be reinstated into good standing.

One new constituent society has been organized. The physicians of Houston and Peach Counties have combined to form the Houston-Peach constituent society with eleven members for this year.

Delegates to the American Medical Association: The next triennial reappointment of delegates to the American Medical Association will be made at the Minneapolis meeting of the A. M. A., June 11-15, 1928. In view of the excellent showing which we were able to make of seventeen hundred and seventy-one members on April 1, we believe that Georgia will continue to be entitled to three delegates.

Journal: A complete report on the Journal will be made to you by the Chairman of the Publication Committee. However, I am taking the liberty of quoting here my letter of transmission, as follows:

"You will note that the printing and mailing of the Journal cost only \$5,986.64; whereas, the income from advertising alone brought in \$6,071.09. In other words, the advertising alone brought in \$84.45 more than the actual cost of printing and mailing the Journal.

"However, in computing the cost of the Journal we have included one-half the total salaries paid, one-half the rent, and other expenses such as postage, envelopes, stationery, news clippings, addressograph supplies, etc. This grand total of all expenses which could possibly be charged to the Journal amounts to \$8,499.76. Now, since three dollars out of every membership fee is supposed to go to the Journal and since we have, for the year 1927, seventeen hundred paid members the Journal funds should receive three times seventeen hundred which would be \$5,100.00. If to this is added \$6,071.09 the income from advertising, it would give the Journal a total gross income of \$11,171.09. Now, if we sub-

tract from this the total gross cost of the Journal and all work pertaining to it, \$8,499.76, we will have left \$2,671.33. Therefore, you will readily see that the Journal during this year, has actually contributed this amount to the support of the Association in addition to paying all of its expenses. In order for the Journal to properly represent the Medical Association of Georgia it should have at least the total amount of money which it earns. It is not fair to the Journal for it to be made to help support the Association.

"Therefore, I would suggest that as soon as the funds of the Association will permit that the income of the Journal be accounted for separately and that it be allowed to have its rightful income so that we may have a real worthwhile Journal."

Financial Report: On May 1, 1928, we had \$4,720.57 with all current bills paid; whereas, on May 1, 1927, we had \$5,736.72, giving us \$1,016.15 less than last year. Our total income for the fiscal year ending April 30, 1928, was \$14,667.55; whereas, our income for the fiscal year ending April 30, 1927, was \$14,105.48, showing an increase in income of \$562.07. A detailed financial statement has been submitted to the council which constitutes the Finance Committee of the Association.

Your committees—both standing and special—have served the Association well. Their reports will be presented to you by their respective chairmen.

Multiplicity of Medical Organizations: In the annual report of Dr. Olin West, Secretary of the A. M. A. (Journal A. M. A., May 5, 1928), he discusses the subject of "Multiplicity of Medical Organizations." His remarks are of such great importance to organized medicine that I am taking the liberty of quoting them to you, as follows:

"For some years there has been a persistent tendency toward the creation and operation of independent scientific societies until now there are many of them in the field, some highly specialized, some apparently duplicating the work of our own societies or actually attempting to substitute for them. Besides these there are many others not strictly scientific or frankly non-scientific in character whose programs of work and statements of objectives closely parallel those of the various units of our own organization. The members of all these are, for the most part, members of our component county societies. Still other groups have come into being, and their number is not inconsiderable, made up of physicians and laymen and directed, in many instances, by the lay element in their membership. Present-day requirements of various organizations and agencies, established by

legislative enactment or voluntarily, having to do with hospitals have resulted in the conversion of the staffs of these institutions into scientific societies. The demands, in time and effort, made on our own members who are affiliated with all of these independent bodies are so great that there is serious question as to whether the medical profession and the public are not actually suffering from the effects of over-organization due to the existence of a veritable multitude of societies, clubs, institutes, colleges, convocations, congresses, conferences, assemblies and associations. Of course, many of these are doing good work, some are helpfully supplemental to regularly organized medical societies, and it is probably true that a few of them are doing what our own societies cannot readily do. It is possible, however, if not definitely a proved fact, that some are merely intruding, duplicating and interfering, whether designedly or otherwise.

"Over-organization of a profession into official and independent groups will surely lead to division of loyalty, dissipation of effort, wasteful expenditures, inefficiency and obstruction to scientific progress. Over-organization of the medical profession cannot be effected except with the consent and through the participation of the individual physician. He, as a free agent, can and will decide where his loyalty will be given, where his contribution will be made, and how and where his effort and his co-operation will be offered; only he, with his kind, can produce and maintain purposeful and efficient organization through which the work that is given the medical profession to do can be well done.

"The American Medical Association is numerically stronger than ever before; we fondly hope and sincerely believe that as a national society it is discharging most of its duties and responsibilities with reasonable efficiency. Our constituent state associations are, beyond any question, stronger and more efficient than they have ever been. There is reason to believe that some component county societies, among them those that formerly were both strong and efficient, have felt the deleterious effects of the existence of too many organized groups, too many meetings, and the division of effort and weakening of allegiance that can hardly fail to develop under such circumstances. These county societies should be given such stimulation and assistance as can be provided, but can best be revived and brought back to efficiency through their own effort and through the undivided support of their own members."

These remarks of Dr. West's deserve our thoughtful consideration, since the real back-

bone of organized medicine is the component county society. We should give it every assistance and allow nothing to interfere with its proper function.

Field Work of Secretary-Treasurer: During the year your Secretary-Treasurer has visited ten district societies and several county societies. He has found everywhere a lively interest in the affairs of the Association and has received generous support and encouragement from both officers and members throughout the state.

Conclusion: In conclusion I wish to make grateful acknowledgment for the assistance given the central office by all officers and members. At times our work has been strenuous and arduous, but always it has been a labor of love for the greatest, most charitable body of men on earth—the members of the Medical Association of Georgia.

The President: As our Secretary's most excellent report pertains in part to expenses and income, it will be automatically referred to the Council for action.

REPORT OF COUNCIL

Dr. C. K. Sharp, Chairman, presented the following report:

COUNCIL

The Council held three meetings during the fiscal year, as follows:

First meeting was held at the office of the Association in Atlanta on June 22, 1927. Ten districts were represented. The Secretary-Treasurer made a report of the financial condition of the Association. Statements showing the total membership for 1926 and the membership to date of each county society was furnished the Councilors for their respective districts. Dr. Chas. E. Waits, Chairman of the Committee on Public Policy and Legislation, presented a bill sponsored by the Georgia State Nurses' Association; the Basic Science Bill and an amendment to the Medical Practice Act sponsored by the Association, which were read, approved and recommended for introduction and passage by the General Assembly of Georgia at its 1927 session. The House of Delegates having appropriated the sum of One Hundred Dollars to carry out the legislative program of the committee, the amount being inadequate; the chairman was authorized to use his discretion in the expenditure of additional funds in an effort to secure the passage of the bills.

The second meeting of the Council was held at the office of the Association on August 2, 1927. Ten districts were represented. Dr. C. K. Sharp was elected chairman to fill the unexpired term of Dr. T. C. Thompson, our deceased chairman. Dr. Chas. E. Waits, Chair-

man of the Committee on Public Policy and Legislation, made a report of the progress with the legislative program in the General Assembly and it being evident that it would be necessary to spend more funds than originally estimated by the House of Delegates and the Council, motion was adopted for the Councilors to guarantee the funds to continue the work of the Committee on Public Policy and Legislation to secure the passage of the bills and in the event the House of Delegates refused to approve and appropriate the funds spent, the Councilors would pay same. Dr. Marion T. Benson, President of the Fulton County Medical Society, pledged the society for the payment of Five Hundred Dollars to carry on the work. Funds were appropriated to pay for floral offerings sent to Vidalia for our deceased Chairman, Dr. T. C. Thompson. Drs. E. C. Thrash, M. M. Head and Wm. H. Myers were appointed as a committee to draft suitable resolutions on the death of Dr. Thompson.

Third meeting of the Council was held at the office of the Association in Atlanta, March 21, 1928. Eight districts were represented. Report and recommendations by the Committee on Public Policy and Legislation to be made to the House of Delegates were approved. Motion carried to approve an appropriation of not more than Twenty-Five Dollars to defray the expenses of the Committee on Health and Public Instruction to promote health examinations at the annual session of the Association at Savannah, May 9, 10, 11. Council approved the action of the Publication Committee in increasing the size of the Journal to seventy-six pages. Dr. L. D. Parry having admitted being guilty of plagiarism, motion carried to bar him from reading a paper before the Association for a period of two years. Council approved the action of the Committee on Scientific Work to place only twenty-seven papers on the Scientific program together with eight clinics. Motion carried authorizing the Secretary-Treasurer and President to certify the delegates to the American Medical Association elected in 1926, they having been elected for two years and had only served during one session.

C. K. SHARP, Chairman.

Dr. E. C. Thrash: I move that the report of the Council be adopted. Motion seconded by several and unanimously carried.

REPORTS OF COMMITTEES

COMMITTEE ON SCIENTIFIC WORK

Dr. V. P. Sydenstricker, Chairman: The program constitutes the report of this Committee. It has been modified by introducing clinics on one afternoon, which we hope will

meet with the approval of the Association. Our guests this year will be Dr. George E. de Schweinitz of Philadelphia, and Dr. Clifford G. Grulee of Chicago, and if it is in order it might be well to mention at this time that the payment of their expenses will have to be taken up.

I wish to acknowledge the work of the other members of the Committee, Dr. Boland, Dr. Bunce and our President, which really made our program possible.

The President: As part of this report involves the payment of money, it will be referred to the Council for action. It has been customary to take care of the expenses of our guests, but the Council must act on this matter first, and then the House will ratify their action.

Dr. John W. Daniel: I move that we accept the portion of the report referring to the program, and that it be made the official order of business of the session.

Motion seconded and unanimously carried.

COMMITTEE ON PUBLIC POLICY AND LEGISLATION

Dr. Charles E. Waits, Chairman: I will omit in this report the details of all of our meetings, for we had so many that to detail them would make the report cumbersome.

REPORT OF COMMITTEE ON PUBLIC POLICY AND LEGISLATION

SECTION 1

Your Committee desires to report as follows concerning the various legislative measures referred to it for consideration during the year: These measures included—

First: An Act to establish a State Board of Examiners in the Basic Sciences underlying the practice of the healing art.

Second: An Act to amend an Act concerning the manner of appointment of our regular State Board of Medical Examiners.

Third: An Amendment to the Workmen's Compensation Act.

Fourth: An Act to abolish a tax on private hospitals.

Fifth: An Act requiring examination and health certificate of all persons applying for marriage license.

Additional measures referred for endorsement of our State Association included—

First: An Act Regulating the Practice of Professional Nursing in the State of Georgia.

Second: An Act to regulate the practice of the healing art to protect the public health in the District of Columbia.

Third: An Amendment to the income tax law granting the deduction of the expenses incurred by physicians while in attendance of medical meetings.

Fourth: An Act providing for the exemption of dogs for vivisection.

Your Committee was organized immediately after appointment and held a meeting jointly with Council in the office of the Secretary on June 8, 1927, for the purpose of outlining and initiating our legislative program. After a free discussion of the proposed legislative measures and upon the advice of our attorney it was decided to select from the list and try to have enacted the Basic Science Act and the Amendment to our Medical Practice Act.

These Acts were drafted in accordance with Council's authority and introduced in both House and Senate during the second week of the legislative session. Since our legislative program was not definitely known until just prior to the opening of the Legislature your Committee had little time to effect an organization that would insure passing of these Acts. In spite of this handicap your Committee feels that a fair degree of success was attained.

It was evident from the beginning that our Basic Science Act would have strong opposition. Opponents of the Act had organized jointly with well paid attorneys and full time lobbies. In spite of the splendid organization and financial resources of our opponents both Acts were carried successfully through all House and Senate Committees, passed by the Senate and had had their second reading in the House when the Legislature adjourned.

Owing to the usual confusion in the Legislature during the last two weeks of the Session and some unusual political controversy in both House and Senate, we found it practically impossible to persuade the Rules Committee in the House to include the Acts in their last two weeks' program.

The Amendment to our Practice Act had no opposition but from time to time it was confused with the Basic Science Act. It was probably because of this confusion that its progress was handicapped. Had the Basic Science Act reached a final vote in the House its passage would have been doubtful, since our strongest opposition seemed to be in this Body.

An itemized statement of your Committee's expense is included in the Secretary's Annual Report. Every possible effort was made to economize in our expenditures. With the exception of one hundred dollars paid to a second attorney, whom we now know was unwisely employed, no money was badly spent.

While we failed to accomplish this much needed legislation we believe our experience during the past year will enable us to proceed more intelligently and with a greater

degree of success with our future program.

Other legislative measures referred for the endorsement of the Association were reviewed by your Committee and where possible, such endorsement was secured.

The Act regulating the practice of professional nursing in Georgia as originally drawn seemed to present many objectionable features, most of which were finally stricken from the Act before its passage. Perhaps the Act still contains some objectionable provisions, but undoubtedly is an improvement on the old Act.

SECTION 2

Upon a basis of our year's experience and study of the medical legislative problems of our State, we wish to submit for your consideration and approval the following recommendations concerning our legislative program for the ensuing year:

First: That Article X of the Constitution be amended as follows:

Amended by substituting the words ten dollars for the words five dollars, in the second sentence and third line of Article X of the Constitution.

Second: That we continue vigorously our fight for the enactment of a Basic Science Act.

Third: That our Act as drafted last year be amended to correspond as nearly as possible to the present Model Basic Science Act recommended by the American Medical Association.

Fourth: That all other Acts on our legislative program be abandoned until some disposition is made of the Basic Science Act.

Fifth: That all legal matters pertaining to our legislative program be directed by the Association's attorneys.

Sixth: That the Association enlist the services of the Woman's Auxiliary of the Association, and through the Auxiliary the support of the various Women's Civic Clubs, in the enactment of our proposed legislation.

Seventh: That a sum not to exceed five hundred dollars be appropriated for the use of your Committee this year in its educational campaign in behalf of our proposed legislation.

With reference to the above recommendations it has become apparent that unless our dues are raised the funds of our treasury will within a few years be exhausted. More funds will be needed for medical defense, legislation, public health work, and especially for the prosecution of illegal practitioners. Our State dues are now among the smallest in the country.

Should the Association see fit to adopt this amendment next year the treasury will not

benefit from the increase in dues until 1930, at which time the money will be badly needed.

Concerning the Basic Science Act, if we expect to have this measure enacted next year it will be necessary to carry on an active educational campaign in behalf of the Act this year, and preferably before the State election in September. Every prospective Representative and Senator should be made familiar with the Act, and where possible their active support for the measure secured.

We submit herewith a new draft of the Basic Science Act, which corresponds to the present model Act of the American Medical Association. While your Committee appreciates the need and importance of the other legislative measures recommended last year, our experience with the two Acts which we failed to get through, leads us to feel that only one should be dealt with at a time. If proper educational work is done in behalf of the Act this year, we believe that one or both measures can be enacted with little difficulty at the next Session of the legislature.

In conclusion your Committee wishes to express their appreciation to the Officers and Members of the Association for the loyal support and encouragement given us during the year.

Respectfully submitted,

CHAS. E. WAITS, Chairman.

Dr. James N. Brawner moved that the report be accepted in two sections, concerning the raise in dues and the expenditure of \$500 and that a separate resolution be presented to the House of Delegates in reference to the raise in dues.

Motion seconded, and after some discussion, unanimously carried.

The President: I will rule that by the adoption of this report its recommendation will serve as notice that next year the question of a raise in dues will come up.

COMMITTEE ON HOSPITALS

Dr. John W. Daniel: In the absence of Dr. Lentz, because of a death in his family, I have been asked to read his report to you. This will vary slightly from the report of Dr. West, quoted by the Secretary, in that we ask for a Hospital Association in this Society. The idea is not to have a separate meeting, but that the men located in the larger centers might be of benefit to the hospitals throughout the state, and, on the other hand, that many things which come up in the small hospitals may be of benefit to the larger ones. The report is as follows:

REPORT OF THE COMMITTEE ON HOSPITALS

This Committee begs to report their regrets that its function has perhaps not been served

within any way near the bounds it should have been, due principally to the lack of co-operation of several hospitals in the State on attempting to form a Hospital Association of Georgia, late in 1927 and early in 1928; and due further to the personal inability of the Chairman to serve actively within the past month when he should have been available.

There has been in the past considerable feeling, with reference to a Hospital Association for the State, rather on the unfavorable side; but this, your Committee feels could be overcome with some effort on the part of those interested in the hospital field, working in conjunction with the State Medical Society.

There are a great many problems which affect hospitals; therefore the respective communities, the doctors and the indigent poor; and the Medical Profession must be jointly interested with Hospital Administrations in working out troubles in the Nursing Department, Intern Service and the Workman's Compensation Act, also Insurance in general; and we cannot hope to remedy any of these unless we can put up a strong front to the concerned interests.

A great many of the more progressive minds of this State, and many other States are tending towards special State hospitals for the indigent State poor, and the indigent poor of the greater part of Georgia have no hospitalization facilities. This is another great problem. Many more problems will come up every day, and it is only through co-operative effort and by cataloging troubles and defects and by round table discussions to arrive at a uniform method of procedure in similar cases in all hospitals.

It is, therefore, the sense of this Committee that efforts be begun immediately to form a Hospital Association of the State of Georgia with a minimum membership fee and that its first meeting be held in conjunction with the State Medical Society in Savannah at its next meeting.

Respectfully submitted,

C. S. LENTZ, Chairman.

Dr. James N. Brawner moved that the report be adopted as read. Seconded by Dr. Cleveland Thompson, and unanimously carried.

COMMITTEE ON NECROLOGY

Dr. R. L. Miller, Chairman, presented the following report:

To the House of Delegates of The Medical Association of Georgia:

We, your Committee on Necrology, beg to submit the following:

It is with profound sadness and sorrow that we have to report that the grim hand of death has fallen heavily upon the membership

of our Association during the past year. Many of our most honored and faithful members have passed from us into higher and better fields of action. In the passing of this number the Association has sustained an irreparable loss.

In submitting this list of members who have died during the year, we believe it is as nearly complete as is possible under the loose manner of reporting deaths by the various secretaries of the component societies.

George T. Alexander, Forsyth.
 John D. Bailey, Summertown.
 Henry H. Battey, Rome.
 John C. Beauchamp, Williamson.
 Robert E. Brinson, Wrightsville.
 William T. Brown, Atlanta.
 John K. Burns, Sr., Clarksville.
 Thomas D. Coleman, Augusta.
 John D. De Lamar, Columbus.
 Frank C. Folks, Waycross.
 Thomas G. Gauntt, West Point.
 Stephen H. Hankinson, Augusta.
 James C. Harris, Reidsville.
 Walter B. Jameson, Augusta.
 Charles G. Jenkins, Edison.
 Lawrence M. Johnson, Yatesville.
 Peyton H. Keaton, Damascus.
 Giles S. Kelley, Lawrenceville.
 Marion M. Kershaw, Augusta.
 John M. Knight, East Point.
 James A. Lee, Gardi.
 George W. Malone, Sandersville.
 Henry H. Malone, Augusta.
 Henry S. Maloy, Milan.
 James E. Mangham, Reynolds.
 Charles E. Murphey, Atlanta.
 Roderick D. McLeod, Lyons.
 William P. Nicolson, Sr., Atlanta.
 Charles T. Nolan, Marietta.
 Walter E. Parish, Savannah.
 T. E. Pennington, Naylor.
 William A. Post, Grantville.
 Thomas W. Reeves, Carrollton.
 William T. Rogers, Coleman.
 Henry T. Simpson, Smithville.
 Thomas C. Thompson, Vidalia.

Respectfully submitted,

R. L. MILLER,
 J. O. ELROD,
 E. T. COLEMAN,
 Committee.

Dr. Fort stated that Dr. Philip H. Fitzgerald of Blakeley, an active member, had recently died.

The Secretary: The list does not contain all of the names of the Doctors who have died in Georgia during the year, but those who were members of the Association. If a man had been a member in good standing for several years, even if he had not paid his dues

for one or two years, his name was included, but if a man had not paid his dues for eight or ten years it was felt that his name should not be included.

Dr. R. L. Miller: I wish to express our thanks to our Secretary for his great assistance in getting up this report, and move that the report be adopted.

Motion seconded and unanimously carried.

COMMITTEE ON HEALTH AND PUBLIC

INSTRUCTION

Dr. Theodore Toepel, Chairman, presented the following report:

REPORT OF COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

The Committee on Health and Public Instruction has had three called meetings, one in Augusta and two in Atlanta. The second meeting, held in Atlanta, was especially noteworthy, due to the questions discussed and results obtained. It was an all day meeting, divided into two sessions. Besides the members of this committee there were representatives present from: State Nurses' Association, State Board of Health, Commonwealth Fund, State Tuberculosis Association, Woman's Auxiliary of Medical Association of Georgia, State Parent-Teachers Association, Women's Christian Temperance Union, Georgia Health Week Committee, Federation of Women's Clubs and the Chairman of the Committee on Public Policy and Legislation of our association.

A committee, appointed at the morning session, presented the following recommendations to the meeting in the afternoon, which were unanimously adopted: 1. In establishing clinics that individuals and groups should secure the direction and co-operation of the local, organized medical society in their organization and conduction. Under such auspices clinics should be encouraged. That social investigation be the basis of determining the economic status of the client in the clinic. 2. That community support of hospitals be stressed, and that the minimum requirements of the American College of Surgeons be adopted. That in hospitals maintaining schools of nursing the minimum standard of the State be enforced. It was recognized that it is fundamental to the whole situation that the students of medicine and nursing be given more and better knowledge for their co-operative tasks. 3. That the organization of a State Hospital Association be considered. 4. That all groups continue the emphasis of periodic physical examinations, first for themselves, and then for others. The program of health education carried on by the State Department of Health was unanimously endorsed.

The procedure of securing the co-operation of the local medical society was especially commended. 5. That discussion is fundamental to progress in solving problems and frequent meetings of this kind be encouraged for local groups. 6. That the health activities of the volunteer state agencies be endorsed and their individual programs of health work continued, but that during the coming year emphasis be placed on the county adoption of the Ellis Health Law; that emphasis be given to the minimizing of typhoid fever in regard to the open well, the sanitary privy and typhoid inoculations. That a meeting of all these representatives be held, preferably in June, for the clearance of all public health activities. Your committee wishes to emphasize the following: The County Medical Society can, by a proper supervisory influence over free pre-school and school examinations, free baby clinics and other similar clinics, maintain its leadership in preventive and civic medicine by aiding and co-operating in these activities for civic health improvement. The fundamental knowledge thus gained in childhood would make these individuals in the future far less susceptible to the appeal of cults than is the average adult population of today.

II. At the meeting of the scientific committee a tentative health examination record was presented, which with slight changes received the committee's approval as did a request to demonstrate to the members, assembled in Savannah the practicability of the approved health record. This health record has also been approved by the State Board of Health and received the endorsement of the Councilors at their last meeting in Atlanta. Your committee recommends the adoption of the attached health record and the printing of ten thousand copies with two thousand cards as per copy, to be displayed in the doctor's office, at the price of one dollar for one hundred copies with the card. The committee further recommends that the charges for the examination be regulated by the county societies, but it suggests that a moderate fee be charged so as not to defeat the purpose of the examination.

III. Your committee recommends the following: That the incoming president appoint a commission of twelve physicians to represent the twelve congressional districts, the president in his selection to give preference to such physicians who are interested in obstetrics, to make a survey of the Midwife Situation in Georgia, similar to the survey made recently in Virginia, plans and purposes attached, this commission to report its findings to the next house of delegates in 1929.

IV. Health education must originate in the organized medical profession and this task must not be allowed to drift into commercial and unethical channels. In order to be the promoters of individual and community health education this committee recommends to you, through the proper course, to make an appropriation of twelve hundred dollars, to enable the committee, in close co-operation with the secretary of the association, to establish and maintain a weekly news service to the State press, covering the subjects of medicine, hygiene, sanitation and public health.

Respectfully submitted,

THEODORE TOEPEL, Chairman.

Dr. E. C. Thrash: I move that we adopt this report, except that the appointment of the committee on obstetrics be left in the hands of Dr. Toepel's committee, and that the report of this committee be made a part of his report on health and public instruction next year.

This amendment was seconded, put to a vote and carried.

Dr. Toepel's motion to adopt the report, with the amendment, was then put to a vote and unanimously carried.

CANCER COMMISSION

Dr. J. L. Campbell, Chairman, presented the following report:

CANCER COMMISSION

Your Cancer Commission was authorized eleven years ago in the city of Savannah. The present occasion is saddened by the absence of the late Dr. White who was untiring in his devotion to the educational work for cancer control. While we miss him in person, we are inspired by his memory and feel that he is watching with interest the work that was so dear to his heart.

Since its organization, the Cancer Commission has endeavored to spread only well established facts about cancer. It has never advocated any method of treatment or plan of procedure except to urge physicians of Georgia to study the cancer problem and keep abreast of the times. It has urged county societies to devote at least one meeting annually to cancer and to encourage the dissemination of such knowledge among the laity as will enable them to recognize the disease early enough for it to be cured.

It has sought to advise the public that early cancer is curable and that the only way to know the truth regarding cancer is to consult the family physician and insist on a thorough examination. In fact, we have strongly advocated periodical examination for those within the cancer age.

There has been an increase of 13.3% in the cancer deaths in this state during the last five years, and we trust that the Association will make it possible for the Cancer Commission to function more actively in the future.

Since our last report many members of the Commission have been active in the discharge of their duty. In fact, I believe more thorough work has been done than in any previous year. Reports from 80% of the members of the Cancer Commission show that county societies have been urged to hold special meetings, the newspapers have been persuaded to carry long series of articles furnished by the National Society, and many special articles have also been published. Time will not permit us to mention all the newspapers that have devoted space to the subject, but when our leading dailies—such as the *Augusta Chronicle*, the *Albany Herald*, and others equally prominent—give space to a series of sixteen articles averaging more than five hundred words each, it shows that interest has been aroused. Many public gatherings have been addressed and the people show an increasing interest in the subject. At some of these meetings literature furnished by the National Society has been distributed, together with other well prepared material. Recently the Commission has distributed a pamphlet entitled, "A Heart to Heart Talk with the People of Georgia." We are pleased to note that it has been well received. Professor W. A. Sutton, Superintendent of Schools, Atlanta, Georgia, has ordered it read at faculty meetings in every school in Atlanta and has requested the presidents of the Parent-Teacher Association to have it read at their meetings. I wish I might mention in detail the excellent work done by many of the district chairmen, but that would lengthen this report beyond reasonable limits.

The Staff of the Albert Steiner Ward of the Grady Hospital is doing splendid work. Weekly conferences are held, to which the entire profession of the state is invited. At these conferences many rare and interesting cases are presented and discussed.

In conclusion, I want to urge the Association to set aside a small sum—a sum just sufficient to pay for stationery, stenographic work, and postage—so that the work may be carried forward with greater impetus.

J. L. CAMPBELL, Chairman.

(Report read by Dr. G. Y. Moore, in the absence of Dr. Campbell.)

Dr. Moore moved the adoption of this report, with the exception of the Section regarding the appropriation of money. Motion seconded and unanimously carried.

MEDICAL HISTORY OF GEORGIA

Dr. E. C. Thrash, Chairman, presented the following report:

REPORT OF THE COMMITTEE ON MEDICAL HISTORY OF GEORGIA

Your Committee, consisting of all Ex-Presidents and present officers of the Association, appointed by the House of Delegates at Athens in 1927 to investigate the advisability and feasibility of preparing a Medical History of Georgia, beg to submit the following report:

A Meeting of this Committee held its first Meeting on December 7, 1927, at the Academy of Medicine in Atlanta and adopted the following resolution after electing E. C. Thrash as Chairman and A. H. Bunce, Ex-Officio, Secretary:

"Be it resolved, That a Sub-Committee be appointed by this General Committee consisting of Dr. E. C. Thrash as Chairman and two such Ex-Presidents as he may select with the President and Secretary as Ex-officio members of this Committee, making a total of five. The duties of this Sub-Committee shall be to organize a movement to collect data for the purpose of compiling a Medical History of Georgia. The Sub-Committee is authorized to call upon any member of the General Committee or any member of the Medical Association of Georgia for the purpose of aiding it in its work. The plan of this organization and the data collected shall be submitted to the House of Delegates at its next annual meeting. It is recommended by the General Committee that the House of Delegates make this General Committee permanent so that it may finally complete the History and arrange for its publication. The Sub-Committee is to be under the direction and guidance of the General Committee."

The Chairman of this Sub-Committee appointed Dr. M. A. Clark, Macon; Dr. Frank K. Boland, Atlanta; Drs. Mulherin and Bunce being Ex-officio members.

The Sub-Committee had a meeting on Saturday, December 10th and formulated the following plans:

The Chairman of the Sub-Committee was ordered to write letters to each of the members of the General Committee, the purport of which should be as follows:

"Our desire is to have the Ex-Presidents in their respective districts to co-operate with the Councilor in the District and that they together immediately begin the work of collecting, compiling, and correlating all medical history in their respective districts. This is a big undertaking, and if it is a success every man must do his full duty. All historical matter collected from any source either

(Continued on page 329)

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

JULY, 1928

ALLEN H. BUNCE, M.D., Editor

H. L. ROWE, Business Manager

Publication Committee

E. C. THRASH, M.D., Chairman

A. S. M. COLEMAN, M.D.

M. M. HEAD, M.D.

Articles are accepted for publication on condition that they are contributed solely to this Journal.

Manuscripts should be typewritten, double-spaced, and the original (not the carbon copy) submitted. Used manuscript is not returned unless requested.

Communications and items of general interest to the profession are invited from all parts of the State. We especially invite county society secretaries to send us information of happenings in the county that would be of interest to the members throughout the State.

Reprints should be ordered within 30 days after the appearance of an article, since all type will be destroyed at the end of that time.

Editorial Department

APPENDICITIS IN GEORGIA

While there are no known means for prevention, there is no surgical disease in the abdomen that carries such a degree of preventable mortality as uncomplicated appendicitis and for this reason I have attempted a survey of the hospitals of this state for the purpose of primarily ascertaining the problem and secondarily of soliciting suggestions for a solution. If surgeons in co-operation with superintendents of hospitals will lend active assistance, this preliminary survey will be completed in summaries, using this form for reports, post operative diagnoses being the guide. Appendices removed in the course of other operations have no statistical value, even though pathological. There are certain factors of mortality that are not generally recognized that would increase the death rate statistics. Our own follow up records indicate that approximately 1% should be added to the general death rate of

appendicitis for patients dying from obstruction after leaving the hospital and it is probable that some deaths are charged to direct complications developed while in the hospital for appendectomy, thus indicating a lower mortality rate than is warranted for the latter. Notwithstanding these factors 40% of all post operative deaths from abdominal disease proceed from the appendix and the average at death is 32 years which represents a loss of human life at high tide of efficiency.

The laity, the attending physician, and the surgeon constitute a triangle of responsibility.

The State Board of Health reports for 1927, 330 deaths from appendicitis classified as follows: post operative deaths in the hospital 171; in the home 66; deaths without operation in hospitals 15, and in the home 78

There being 237 post operative deaths based on an average mortality of 5% would mean that 4740 operations were performed for appendicitis in Georgia during 1927. The American Journal of Public Health gives the average valuation of human life for all ages at \$13,039 and at this rate a saving of 33 1-3% of lives (79) would make an economic per capita credit of \$217.13 for preliminary consultations and expenses incidental to the 4,740 operations. The regretful "if" that applies to many fatal cases makes this estimate reasonable. For those who would have it, appendicitis is becoming an economic question because ever present it pays to get well quickly. Even in recoveries early operation saves morbidity, loss of time and the expenses incidental to secondary operations. There is very little difference in morbidity between temporary recoveries and early operative cures, and statistics do not warrant the wisdom of tiding an acute case over for interval operation for the Surgeon General's report (1925) gives a mortality rate (for a selected population) of 23% for early operative cases and 65% for interval operations, the latter being made perhaps more radical.

The following is a copy of questionnaire with summary of replies from thirteen of the larger standard hospitals of the state for 1927 having a daily average of 929 patients.

The total number of beds in Georgia occupied daily in general hospitals is 3045.

Number of cases of acute appendicitis, 1332; deaths, 52.

Number of cases of chronic appendicitis, 1023; deaths, 12.

Total number of operations for acute and chronic appendicitis by any two surgeons in each hospital doing the greatest number operations (24 operators), 987; deaths, 15; 11.5%.

Remaining number of operators (120) for remaining number of operations for acute and chronic appendicitis, 1133; deaths, 44.

Deaths from gall bladder disease for same period, 18.

Deaths from acute and chronic intestinal obstruction, 35.

R. M. HARBIN, M.D.

Rome.

STATE'S PUBLIC HEALTH WORK.

Through the instrumentality of Governor Hardman, who is a physician and a vigorous supporter of the state's public health work, the Georgia state board of public health has today one of the finest laboratories in the south.

A large portion of the basement of the capitol, heretofore deteriorated and used for storage, has been completely renovated, remodeled and reconditioned specifically for the work of the various branches of laboratory research, examinations, tests, analysis and serum manufacturing—the whole so scientifically coordinated that the rapidly expanding services of this branch of the public health department have been expedited, broadened and made more efficient.

The new laboratory was formally opened Friday at a luncheon given by the State Board of Health, and attended by a number of state officials and others. At this luncheon meeting, of which Chairman Robert F. Maddox, of the State Board of Health was chairman, a silver piece was presented to Governor Hardman as an appreciation of the exceptionally splendid services of the executive in making this new laboratory possible, and in the executive support given to the State Board in many ways.

Georgia has one of the best health departments of any state in the Union, and the best of any state in comparison with the funds for its maintenance provided by the state legislature.

It is working along scores of lines for health maintenance, disease prevention, disease cures, distribution of vaccines and anti-toxins, vital statistics, hospitalization, etc. It is marvelous to a layman to analyze the various important activities of the department. To it Georgia's excellent health record is largely responsible.

The conservation of human energy—of the force of man power—is one of its outstanding objectives, and viewed from a cold-blooded standpoint of economies the saving in dollars and cents to Georgia and Georgians annually, through the good services of this department, amounts to many millions of dollars.

The State Board of Health, of which Mr. Maddox has been chairman for several years, is to be congratulated and commended for its splendid work. The chairman has given, and gives unselfishly, much of his time and talents to this work, and Dr. Abererombie, the executive secretary of the board, and the state's chief health officer, and his entire staff, stand at the highest in their professional and scientific lines.

Dr. Abererombie is noted as one of the leading public health officials in the nation, a skilled physician and a trained master of public health services.—Editorial—Atlanta Constitution, Sunday, June 24, 1928.

PACKAGE LIBRARY

We are pleased to report that a gradually increasing amount of valuable material is being collected for the Package Library. We endeavor to secure reprints of all leading articles from the best medical journals throughout the world. These are then classified and placed in packages ready for your use. The process is continuous so as to keep the material up to date. It is hoped that this may in some small measure help to improve the character of medical literature emanating from the profession of Georgia. Why not avail yourself of this opportunity? Send twenty-five cents to cover the cost of wrapping and mailing.

District and County Societies

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1st Vice-Pres....Myers, Wm. H., Savannah
2nd Vice-Pres.....Elarbee, G. W., Daisy
Sec'y-Treas.....Long, W. V., Savannah

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President.....Chason, Thomas, Donalsonville
Vice-Pres.....S. E. Sanchez, Barwick
Sec'y-Treas.....Watt, Chas. H., Thomasville

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President.....Stukes, J. T., Americus
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Sec'y-Treas.....Greer, Chas. A., Oglethorpe

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President.....Clark, W. H. LaGrange
Sec'y-Treas.....Callaway, Enoch, LaGrange

FIFTH DISTRICT

President.....Ansley, W. S., Decatur
Vice-Pres.....Barber, W. E., Atlanta
Sec'y-Treas.....Camp, R. T., Fairburn

SIXTH DISTRICT

President.....Miles, W. C., Griffin
Vice-Pres.....Miller, G. T., Macon
Sec'y-Treas.....Thompson, O. R., Macon

SEVENTH DISTRICT

President.....Harbin, R. M., Rome
Vice-Pres.....Wood, C. V., Cedartown
Sec'y-Treas.....McCord, M. M., Rome

EIGHTH DISTRICT

President.....Johnson, J. E., Elberton
Vice-Pres.....Reynolds, H. I., Athens
Sec'y-Treas.....Carter, D. M., Madison

NINTH DISTRICT

President.....Coker, Grady N., Canton
Vice-Pres.....Neal, L. G., Cleveland
Sec'y-Treas.....Bennett, J. C., Jefferson

TENTH DISTRICT

President.....Cranston, W. J., Augusta
Vice-Pres.....Revell, S. T. R., Louisville
Sec'y-Treas.....Phinizy, Irvine, Augusta

ELEVENTH DISTRICT

President.....McMichael, J. R., Quitman
Vice-Pres.....Fleming, Albert, Folkston
Sec'y-Treas.....Reavis, W. F., Waycross

TWELFTH DISTRICT

President.....New, J. E., Dexter
Vice-Pres.....Edmondson, J. W., Dublin
Sec'y-Treas.....Cheek, O. H., Dublin

1928 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 20, 1927.

2. Turner County, Dr. J. H. Baxter, Ashburn, November 15, 1927.

3. Terrell County, Dr. Logan Thomas, Dawson, December 1, 1927.

4. Pike County, Dr. M. M. Head, Zebulon, December 3, 1927.

5. Ben Hill County, Dr. L. S. Osborne, Fitzgerald, December 8, 1927.

6. Evans County, Dr. S. T. Ellis, Claxton, December 29, 1927.

7. Taylor County, Dr. J. C. Hind, Reynolds, January 3, 1928.

8. Jasper County, Dr. E. M. Lancaster, Shady Dale, January 6, 1928.

9. Talbot County, Dr. C. C. Carson, Talbotton, January 28, 1928.

10. Wayne County, Dr. M. N. Stow, Jesup, February 9, 1928.

11. Lamar County, Dr. Jno. M. Anderson, Barnesville, March 6, 1928.

12. Terrell County, Dr. Logan Thomas, Dawson, March 7, 1928.

13. Stephens County, Dr. C. L. Ayers, Toccoa, March 8, 1928.

14. Upson County, R. L. Carter, Thomas-ton, March 15, 1928.

15. Crisp County, Dr. J. N. Dorminy, Cordele, April 5, 1928.

16. Henry County, Dr. H. C. Ellis, McDonough, April 10, 1928.

17. Dougherty County, I. M. Lucas, Albany, June 6, 1928.

18. Dooly County, Dr. F. E. Williams, Vienna, June 29, 1928.

19. Macon County, Dr. C. P. Savage, Montezuma, June 29, 1928.

20. Stewart-Webster Counties, Dr. J. M. Kenyon, Richland, June 29, 1928.

21. Sumter County, Dr. Henry A. Smith, Americus, June 29, 1928.

22. Emanuel County, Dr. R. C. Franklin, Swainsboro, July 3, 1928.

NEW MEMBERS FOR 1928

Boland, Chas. G., Atlanta.

Gay, J. G., Atlanta.

Klausman, Mareus, Atlanta.

Mitchell, L. C., Sandersville.

SEMI-ANNUAL MEETING OF THE SECOND DISTRICT MEDICAL SOCIETY

BAINBRIDGE, GEORGIA, APRIL 13, 1928

Meeting called to order, 10:15 Central time, by the President, Dr. J. A. Redfearn. There was a goodly number present.

Invocation was offered by Rev. H. H. Shell, after which a warm welcome to the society was delivered in behalf of the city of Bainbridge by Hon. A. B. Conger. On behalf of the society Dr. J. A. Redfearn thanked Mr. Conger for his warm welcome.

The minutes of the last meeting were read and approved.

The first paper on the program, "Enlarged Bronchial Glands," by Doctor I. M. Lucas of Albany. This paper was enjoyed by all and was freely discussed by Doctors Fort, Cooke and Thrash.

The second paper on the program was omitted owing to the fact that Doctor E. F. Wahl, who was to present this paper, was called away at this time.

The third paper on the program was by Doctor W. A. Selman of Atlanta, entitled "Acute Appendicitis." This was a very timely and interesting paper. It brought out many points about which surgeons do not entirely agree. These points were freely discussed by Doctors Chason, Watt, Neill, Wilkinson and Keyton. The discussion being closed by Doctor Selman. It may be added that during this discussion Doctor Redfearn stated that Doctor Cabot, in a recent talk, said that there was no such thing as chronic appendicitis. That in the laboratory at Boston five hundred (500) so-called chronic appendices and five hundred (500) normal appendices were run through the laboratory, and microscopically no difference could be found. This statement naturally brought about some discussion.

The fourth paper on the program "Mastoiditis," was presented by Doctor Moore of Thomasville and dealt especially with the acute form of mastoiditis. Following this paper there was a general discussion of this subject by Doctors Thrash, Bacon and C. K. Wall. Each one entering in the discussion emphasized the importance of the X-ray as a diagnostic help, especially in the chronic forms of mastoiditis. Dr. Moore stated that his experience with the X-ray had been rather disappointing and he found it was unnecessary in acute mastoiditis.

After this paper the following committee was appointed: Doctor Rainey, Doctor Sanchez and Doctor Chason, to secure the next place of meeting and to appoint members of the society to write papers for the next meeting. Also the duty of the committee to nominate officers for the coming year.

The morning hour not being up Doctor Thrash gave his paper entitled "Problems in Diagnosis." Doctor Thrash talked without manuscript and discussed various problems with which the physician is often confronted. He advised avoiding such terms as neuroses and neurasthenia, but he stated that the psychic element often plays an important part in some cases. He discussed the diagnosis in children of school age. These patients often being undernourished, running an evening temperature, fast pulse and perhaps a cough. The problem is to find what is wrong with these children. Frequently after very careful examination which revealed no pathology, X-ray showed enlarged bronchial glands; sometimes trouble being found in the sinuses. Doctor Thrash's paper was most interesting and helpful to all.

Following this a delightful lunch was served at the Calahan Hotel.

The afternoon session was opened at 3:30. The following resolution was offered and passed: "Resolved, that this society go on record as approving the plan sponsored by the Masons of Georgia for the erection of a Children's Building at Alto, to be turned over to the State of Georgia when completed and to urge the support of this enterprise by every citizen of Georgia."

Doctor Wahl not having returned, Doctor Thrash continued his discussion. This consisted of a clinic, at which time a patient with hemorrhagic areas throughout portions of the body was presented. This was a very unusual and interesting case, no one present being able to recall having seen such a case as this before. Doctor Thrash's impression was that this was a case of endotheliomata. The form of treatment suggested was deep X-ray therapy, which was the treatment the patient had been receiving.

REPORT OF COMMITTEE

Place of meeting Camilla, Ga.

PAPERS

Medicine Dr. M. A. Fort
Surgery Dr. C. K. Wall
E., E., N. & T. Dr. A. S. Bacon
Pediatrics Dr. C. A. Stevenson

OFFICERS FOR THE COMING YEAR

President, Dr. Thomas Chason, Donaldsonville, Ga.

Vice-President, Dr. S. E. Sanchez, Barwick, Ga.

Secretary-Treasurer, Dr. Charles H. Watt, Thomasville.

Adjournment.

CHAS. H. WATT, M.D.

Secretary, Second District Medical Society.

Woman's Auxiliary Medical Association of Georgia

OFFICERS

| | | | |
|----------------------|--------------------------------|--------------------|----------------------------------|
| President..... | Mrs. C. C. Hinton, Macon | 3rd Vice-Pres..... | Mrs. A. J. Mooney, Statesboro |
| Pres.-Elect..... | Mrs. Marion T. Benson, Atlanta | Cor. Sec..... | Mrs. J. A. Selden, Macon |
| 1st Vice-Pres..... | Mrs. Wm. R. Dancy, Savannah | Rec. Sec..... | Mrs. Ralston Lattimore, Savannah |
| 2nd Vice-Pres..... | Mrs. W. F. Reavis, Waycross | Treasurer..... | Mrs. M. B. Allen, Hoschton |
| Parliamentarian..... | Mrs. J. Cox Wall, Eastman | | |

Delegates to A. M. A.

| | | | |
|-------------------------|---------|---------------------------|--------|
| Mrs. C. W. Roberts..... | Atlanta | Mrs. H. M. Fullilove..... | Athens |
|-------------------------|---------|---------------------------|--------|

DELEGATES TO THE A. M. A.

| | | | |
|-------------------------|---------|--------------------------|---------|
| Mrs. C. W. Roberts..... | Atlanta | Mrs. Geo. W. Fuller..... | Atlanta |
|-------------------------|---------|--------------------------|---------|

ALTERNATES

| | | | |
|-----------------------|---------|-----------------------|---------|
| Mrs. Dan Y. Sage..... | Atlanta | Mrs. J. Cox Wall..... | Eastman |
|-----------------------|---------|-----------------------|---------|

WOMAN'S AUXILIARY, AMERICAN MEDICAL ASSOCIATION

The Sixth Annual Session of the Woman's Auxiliary to the American Medical Association was held in Minneapolis, Minnesota, June 11-15, 1928. Over 1200 women registered and they were delightfully entertained by the local auxiliaries.

The business meetings were largely attended, 400 women being present at the all-day session of June 14. Much interest was given to the reading of the papers and State Reports.

The Abstracted Proceedings will be printed at an early date and a copy sent to the membership.

The following officers were elected:

President—Mrs. Allen H. Bunce, 360 Ponce de Leon Avenue, N. E., Atlanta, Georgia.

President-elect—Mrs. George H. Hoxie, 3719 Pennsylvania Avenue, Kansas City, Missouri.

First Vice-President—Mrs. Evarts V. De Pew, 115 East Agarita Avenue, San Antonio, Texas.

Second Vice-President—Mrs. David W. Parker, 52 Clark Street, Manchester, New Hampshire.

Third Vice-President—Mrs. Horace Newhart, 212 West 22nd Street, Minneapolis, Minnesota.

Fourth Vice-President—Mrs. Frank W. Cregor, 1621 North Meridian Street, Indianapolis, Indiana.

Treasurer—Mrs. Irvin Abell, 1433 South Third Street, Louisville, Kentucky.

Secretary—Mrs. M. T. Edgerton, 788 Penn Avenue, Atlanta, Georgia.

Parliamentarian—Mrs. F. L. Adair, 2500 Blaisdell Avenue, Minneapolis, Minnesota.

Directors for two years—Mrs. John O. McReynolds, Dallas, Texas; Mrs. Wayne W. Babcock, Philadelphia, Pennsylvania; Mrs. A. Haines Lippincott, Camden, New Jersey.

Directors for one year—Mrs. F. P. Gengenbach, Denver Colorado; Mrs. William E. Parke, Philadelphia, Pennsylvania; Mrs. J. T. Christison, Minneapolis, Minnesota.

CHAIRMAN OF COMMITTEES

Organization—Mrs. A. T. McCormack, Louisville, Kentucky.

Health Education—Mrs. Geo. H. Hoxie, Kansas City, Missouri.

Hygeia—Mrs. A. B. McGlothlan, St. Joseph, Missouri.

Publicity—Mrs. T. C. Terrell, Fort Worth, Texas.

Program—Mrs. Southgate Leigh, Norfolk, Virginia.

Finance—Mrs. G. Henry Mundt, Chicago, Illinois.

Entertainment—Mrs. William Kuykendall, Eugene, Oregon.

Georgia Tuberculosis Association

OFFICERS AND STAFF

| | | | |
|--------------------|---------------------------------|--------------------------------|---------------------------------|
| President..... | Lee M. Hagg, Macon | Treasurer..... | T. K. Glenn, Atlanta |
| 1st Vice-Pres..... | I. A. White, D.D., Cartersville | Managing Director..... | Jas. P. Faulkner, Atlanta |
| 2nd Vice-Pres..... | R. W. Hatcher, Milledgeville | Health Education Director..... | Miss Mildred S. Manson, Atlanta |
| Secretary..... | Miss Virginia Gibbes, Marietta | Office Secretary..... | Miss Julia Bone, Atlanta |

4 Capitol Square, S. W. Atlanta, Ga.

ADVISORY MEDICAL COMMITTEE

| | | | |
|------------------------|---------|-------------------------------|---------|
| E. C. Thrash, M.D..... | Atlanta | J. H. Bradfield, M.D. | Atlanta |
| Z. S. Cowan, M.D..... | Atlanta | Allen H. Bunce, M.D..... | Atlanta |
| C. C. Aven, M.D..... | Atlanta | Stewart R. Roberts, M.D..... | Atlanta |

HISTORY IN THE DIAGNOSIS OF PULMONARY TUBERCULOSIS

ARTICLE NO. 5

In few other diseases is the taking of an adequate history so important as in a case of suspected tuberculosis. This is all too seldom appreciated by the average physician. He is too apt to judge the case by present symptoms only and not inquire duly into the past history of the case. Yet, painstaking and tactful questioning will frequently throw a flood of light on cases with few or none of the characteristic symptoms. This takes time, yet the time thus spent will often be as illuminating as the laboratory tests on which too many physicians are prone to rely alone for diagnosis.

Not all histories can be taken in an orderly manner, since each patient is an individual equation, and must be treated as such; but questions regarding the following facts and symptoms should be asked in all suspected cases of tuberculosis:

1. Cough (The symptom that most frequently drives patients to seek medical service).
 - a. Dry or productive.
 - b. Mild or otherwise.
 - c. Duration.

If productive, character of—
2. Sputum.
 - a. Amount.
 - b. Mucoid, muco, purulent, etc.
 - c. Blood streaked (This needs special emphasis).
 - d. Malodorous or not.

3. Hemoptysis.

A most important symptom if present, though not pathognomonic, but should be considered tuberculous until proven otherwise.

- a. Frequency.
- b. Last occurrence.
- c. Amount—whether limited to streaks or small clots, etc., or whether there has been actual hemorrhage.

4. Fever.

There is no characteristic type of fever; the slight afternoon rise is most frequently noted.

Some cases are considered afebrile. This is usually due to faulty temperature taking, since it has been shown that it takes six to twelve minutes to accurately record temperature rise. With fever, usually its concomitant symptoms of chills or chilly feelings, headache, backache, anorexia and tachycardia are ushered in. Any one of these symptoms, or all, may be present.

5. Night Sweats.

These may be mild and of local character, limited to head, neck or chest, or so profuse and general as to exhaust the patient.

6. General.

Tired feeling, loss of weight, appetite, condition of bowels, especially diarrhea, menstruation, fistula in ano and hoarseness.

Next in order comes past illnesses. Special inquiry should be made as to attacks of influenza, pneumonia, bronchitis, frequent

(Continued on page 332)

Georgia State Nurses' Association

OFFICERS

| | | | |
|-------------------------|----------------------------------|-------------------------|---------------------------------|
| President..... | Miss Annie Bess Feebeck, R.N. | | |
| | Grady Memorial Hospital, Atlanta | | |
| 1st Vice-President..... | Miss E. Alma Brown, R.N. | 2nd Vice-President..... | Miss Jessie Veazey, R.N. |
| | University Hospital, Augusta | | St. Andrews Apt., Atlanta |
| Secretary..... | Mrs. Alma E. Albrecht, R.N. | Treasurer..... | Miss Jane Van De Vrede, R.N. |
| | Georgia Infirmary, Savannah | | 105 Forrest Ave., N.E., Atlanta |

“NURSES, PATIENTS AND POCKET-BOOKS”

Everything seemed to center around service to the patient in the program of the Biennial Convention of the Three National Nursing Organizations, held in Louisville, Ky., June 4-9, and attended by about five thousand nurses, representing in the neighborhood of seventy-five thousand nurses of this country.

Never before in the history of nursing conventions has the patient been the recipient of so much well merited attention.

Redistribution of nursing service, in terms of modern business methods that will result in lowered cost of nursing service, and at the same time assure a satisfactory income for the nurse, was discussed thoroughly by the various groups, before whom appeared eminent physicians, nurses and educators, all interested in securing for the patient the greatest amount of nursing care for the least amount of money.

It has been estimated that medical bills, including hospital fees and nursing, reach the astounding figures in the United States of \$5,000,000,000 a year. And this despite the fact that nursing centers are increasing, and public health work is accomplishing amazing things. Nursing service comes in for its share of this burden. On the basis of a 12-hour day, the cost of nursing care for an average case runs around one hundred dollars a week if the patient must have continual service. As high as this sounds, the nurse does not profit by the method. The average nurse's income is found to be only about \$25 per week, on the basis of an average of \$6 per day for a 12-hour day.

Patients' bills should be lower. Nurses' pay should be higher. Obviously there is need for adjustment!

Dr. Charles Hubbard Judd, head of the School of Education of the University of Chicago, was one of the principal speakers at the Biennial, his subject being “Adult Education.” He pointed out that the problems confronting the nursing and teaching professions are very similar. “Nurses will be most successful if they know how to deal with both patients and families, just as teachers are most effective when they know how to deal with both pupils and parents,” said Dr. Judd. “If nurses did nothing more than teach the families of patients how to behave under tension, the education of adults would have made great progress in this country. Nurses can render a great service also in the matter of helping families select a suitable diet, but they must deal discriminatingly with the family purse, as well as with the family digestion.”

Dr. Judd suggested that the nursing profession adopt a continuation course for nurses, for the sake of higher standards. In referring to the third year of the regular course, Dr. Judd said he was not quite clear as to whether this was intended for the improvement of the nurses, or to supply hospitals with more free service. He advocates continuation training on a two-year course basis, rather than the third year of training.

Dr. Nathan B. Van Etten of New York appeared before the convention as a member of the Committee on the Grading of Nursing Schools, speaking from the medical viewpoint. Reduction of the number of nursing schools, and higher standards of education and training, were advocated by Dr. Van Etten as a means of relief for “the present intolerable condition of affairs in the nursing profession.” A two-year training course, following four years of high school, was suggested by Dr. Van Etten as the minimum for

the title of registered nurse. Three years for public health work, and four for the operating room, were included in Dr. Van Etten's suggested training for nurses.

Dr. May Ayres Burgess, director of the Committee on the Grading of Nursing Schools, would bring about revolutionary measures for the good of the nursing profession. In her report to the convention of the Three National Nursing organizations Dr. Burgess made some startling statements and prophecies. "The nursing profession will double in size within the next seventeen years unless conditions change, and there is no evidence that the public wants that many nurses" said Dr Burgess. "There are now 2286 nursing schools conducted in hospitals in this country and the number is increasing rapidly. More than 20,000 nurses are being graduated this year. Hospitals relying on student service are unable to employ their own graduates, and other opportunities for nursing service are not increasing as rapidly as new nurses are being admitted to the profession. Over-production is even now resulting in unemployment."

These and other striking facts were presented by Dr. Burgess in her report, the results of an 18-months' nation-wide survey of economic conditions surrounding nursing, and based on 34,000 returns from nurses, 28,000 from physicians and 3400 from patients and other sources.

"In 1900 there was one nurse for every ten doctors," stated Dr. Burgess. "Now, in 1928, there are fifteen nurses for every ten doctors. At the present rate by 1965 there will be forty-four nurses for every ten doctors. Can physicians treble their use of special nurses and persuade their patients to pay the cost? Nursing is growing faster than the population. In 1900 there were sixteen graduate nurses for every 100,000 people. Now there are one hundred and sixty-six. By 1965, if the ratio continues, there will be nearly four hundred and forty!

"This study has been difficult to make and has cost a great deal of money—approximately \$35,000, including all costs to date. A large part of this money has come from nurses. I am bringing this report to you,

asking what you will do with it," said Dr. Burgess, who explained that the findings of the Committee seemed to lead to four important suggestions, as follows:

First: Reduce and improve the supply of nurses. Make a decisive and immediate reduction in the number of nursing students in this country. Raise entrance requirements high enough so that only properly qualified women will be admitted to the profession.

Second: Replace students with graduates. Put the major part of hospital bedside nursing in the hands of graduate nurses and take it out of the hands of student nurses.

Third: Help hospitals meet cost of graduate service. Assist hospitals in securing funds for the employment of graduate nurses.

Fourth: Get public support for nursing education. Place schools of nursing under the direction of nurse educators instead of hospital administrators, and awaken the public to the fact that if society wants good nursing it must pay the cost of educating nurses; that nursing education is a public and not a private responsibility.

The Committee has gone on record that no hospital should be expected to bear the cost of nursing education out of funds collected for the care of the sick. The education of nurses is as much a public responsibility as is the education of physicians, public school teachers, lawyers and other students planning to engage in a professional service. The fact that a hospital is faced with serious financial difficulties, whether or not it will conduct a school of nursing, the need of a hospital for cheap labor, should not be considered a legitimate argument for maintaining such a school. The decision as to whether or not a school of nursing should be conducted in co-operation with a hospital should be based solely on the kinds and amounts of educational experience which the hospital is prepared to offer.

A 600-page volume, under the title "Nurses, Patients and Pocketbooks," has been issued by the Grading Committee, and is now available and can be secured from State Headquarters, 105 Forest Ave., N. E., Atlanta, Ga., at cost, \$2.00, plus postage.

BOOK REVIEWS AND ABSTRACTS

Mark S. Dougherty, M. D.

Department Editor

BOOK REVIEWS

Gynecology, by Howard A. Kelly, A.B., M.D., LL.D. and Collaborators. Published by D. Appleton and Company, New York, 35 W. 32d St. Anything written by Dr. Howard A. Kelly is worth reading and preserving. His latest edition of the monumental work on Gynecology, a book of 1043 pages with 767 illustrations and 14 beautifully executed colored plates is in a class by itself, and must be seen and read in order to be fully appreciated. Of the 49 chapters eighteen are written by H. A. Kelly, five by L. A. Wharten, two each by Emil Novak, G. G. Ward, R. W. TeLinde, R. M. Lewis and R. E. Fricke, one each by R. Glenn Craig, I. C. Rubin, C. W. Vest, G. H. Gardner, L. K. P. Farrar, Leo Brady, W. W. Scott, R. W. Johnson, Jr., G. H. Gardner, H. F. Traut, G. L. Hunner, C. F. Burnam and W. Neill, G. Gellhorn, C. F. Burnam, R. Peterson, G. E. Ward and E. L. Richards.

Due credit is given thorough routine laboratory technique, in uniform blood examinations; urea, nonprotein nitrogen. Basal metabolism is more constantly estimated; glycemia, the precursor of diabetes, is a daily inquest, especially illuminating in pruritus; diabetics are operated upon with large margin of safety; calcium bids fair shortly to come into its own in menstrual aberrations.

The subject of "Radium" is well handled and is described as a most unpredictable therapeutic agent, obviating many surgical operations, also "Endothermy" has come in no small measure to replace the scalpel, also co-operating with routine surgical measures, rendering them far more effective. As said before, it must be seen and read to appreciate its up-to-dateness and completeness.

THEO. TOEPÉL, M.D.

Hay Fever and Asthma—Their Cause, Prevention, and Treatment—By Roy M. Balyeat, M.A., M.D., F. A. C. P. Instructor in Medicine and Lectures on Allergic Diseases in the University of Oklahoma Medical School, member of the American Association for the study of Allergy and Director of the Balyeat Hay-Fever and Asthma Clinic, Oklahoma City; Illustrated with 76 engravings, including 2 in colors. Second edition, revised and enlarged; 310 pages, F. A. Davis Company, Philadelphia. Price \$3.50.

This is the second edition of this book. The author has completely revised and enlarged the book, bringing the subject matter up to date. Many new chapters are included. The significance of hereditary factors in asthma and hay fever is greatly stressed. The relative part that the wind borne

pollinated plants, animals and fowls play in the etiology of this condition is brought out. Methods of testing individuals for the substance to which they are sensitive are described. The treatment of asthma and hay fever, during the attacks and between the attacks, is described in detail. The book is written in a concise and clear cut style and is easily read.

M. S. D.

Crawford W. Long and the Discovery of Ether Anesthesia, by Frances Long Taylor. Eight full page plates, 237 pages. Paul B. Hoeber, New York. Price \$4.00. It is particularly fitting that this book should be reviewed in the Journal of the Medical Association of Georgia. The book is written by Mrs. Frances Long Taylor, the daughter of Dr. Crawford W. Long. It is written in a charming style and portrays in a modest way the life and character of a truly great man. It proves beyond a doubt the validity of Dr. Long's claim to priority in the discovery of the anesthetic properties of ether. Many of Dr. Long's personal letters and many affidavits concerning Dr. Long's early use of ether as an anesthetic are included in the book. A beautiful picture is drawn of the doctor of the old school in his unselfish devotion to the practice of his art and the lofty plane upon which this practice was conducted. This book is a heritage in Georgia literature and should be read by every doctor in the state.

M. S. D.

Intracranial Tumors and Some Errors in Their Diagnosis—Sir James Purves-Stewart. Oxford Med. Pub. 1927. This book contains a review of one hundred and seventeen brain tumors observed by the author. They are considered according to their location. The book is most valuable as the author considers the mistaken diagnoses, and the reasons for error in great detail. All cases were verified by autopsy or operation, and there are numerous photographs of specimens. Typical cases are described as well as the atypical. This book is of chief interest to the neurologist and the neurosurgeon.

W. A. SMITH.

Compendium on Regional Diagnosis in Affections of the Brain and Spinal Cord—Robert Bing. Sixth Edition. C. V. Mosby Co. 1927. This is a revised edition of Bing's excellent outline of regional diagnosis in lesions of the central nervous system. The book is well illustrated and written in a simple

manner, so that a very difficult subject is made easily understandable. No other book can compare with it as an aid in localizing organic lesions of the nervous system.

W. A. SMITH.

Clinical Diagnosis by Laboratory Methods, A Working Manual of Clinical Pathology, by James Campbell Todd, Ph. B., M.D., Professor of Clinical Pathology University of Colorado School of Medicine, and Arthur Hawley Sanford, A.M., M.D., Professor of Clinical Pathology University of Minnesota (the Mayo Foundation); Head of Section on Clinical Laboratories, Mayo Clinic. Sixth Edition, revised and reset with 346 illustrations, 29 in colors. W. B. Saunders Company, Philadelphia and London, 1927; 748 pages octavo. Price, \$6.00. Students, teachers and laboratory workers in clinical pathology will welcome this new edition of Todd's *Clinical Diagnosis by Laboratory Methods* a book which for twenty years has deserved its unusual popularity. This new edition follows the concise, well written, easily understood style of former editions, and is brought up to date by including recent tests and methods. By omitting obsolete and little used tests a slightly smaller book is obtained without decreasing the value of the book. It is a practical laboratory manual giving every essential test and should be available to every laboratory worker doing clinical pathology.

GEORGE F. KLUGH.

New and Nonofficial Remedies, 1928, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1928. Cloth. Price, postpaid, \$1.50. Pp. 489 XLIX. Chicago. American Medical Association.

This book is the work of a distinguished organization, the Council on Pharmacy and Chemistry of the American Medical Association, which some twenty years ago was founded to clean out the Augean stables of proprietary medicines. The Council's plan was and has been the publication annually of a book containing descriptions of those unofficial preparations which after careful investigation have been found worthy of recognition and consideration by the medical profession. Such has been the devotion of the Council members, who serve without remuneration, and such the recognition achieved by their work that today the book describes all the new proprietary products which have a scientific base and which give promise of therapeutic usefulness. The physician who best safeguards his own interests as well as those of his patient will give no consideration to any proprietary medicinal agent which is not listed in *New and Nonofficial Remedies*.

The book is conveniently arranged for reference: each preparation is classified, and each classification is preceded by an authoritative and up to date

discussion of the composition, actions, uses, and dosage of the medicament involved. Annually the book is carefully scrutinized and revised to ensure its being in the forefront of medical progress. Products that have been admitted are re-examined at stated intervals to determine if they are keeping their promise of therapeutic usefulness; and new products are admitted as they are found acceptable.

Among the more important revisions this year are: the rewriting or recasting of the chapters on Medicinal Foods, Insulin, Arsenic Compounds, and Iron and Iron Compounds; revision of the chapters on Ovary and Parathyroid to make them conform to the results of recent research; and revision of the names and standards of the acriflavine dyes. A noteworthy omission is that of all parathyroid gland preparations designed for oral administration, their lack of efficacy by this route having been conclusively demonstrated.

The following are some of the products which have been recognized during the past year and which are now included in the book: Neonol, a new barbitol compound; Mesurol, a bismuth preparation for use in the treatment of syphilis; Bromural, once omitted from the book, but now reinstated as a result of the manufacturer's limitation of therapeutic claims; a number of standardized cod liver oils; Ephedrine, an alkaloid with epinephrine-like properties, and its hydrochloride and sulphate salts; Amiodoxyl benzoate, the ammonium salt of orthoiodoxy-benzoic acid, proposed for the treatment of arthritis; Crotalus Antitoxin, an anti-snakebite serum; several brands of erysipelas streptococcus antitoxin; and Anaerobic Antitoxin, and antitoxic serum for use against gas gangrene.

On account of the careful revisions and the current additions, *New and Nonofficial Remedies* is essentially a new book each year, indispensable to the physician who would keep up with the march of therapeutic progress.

Annual Report of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1927. Cloth. Price, postpaid, \$1.00. Pp. 103. Chicago: American Medical Association, 1928.

The Council on Pharmacy and Chemistry of the American Medical Association annually publishes the reports which tell the reasons for non-acceptance of those products which during the year it has found unworthy of recognition. Some of these reports have been published in abstract in *THE JOURNAL*; all are contained in full in the volume which is the subject of the present review. The physician who has learned to ask the manufacturer's "detail" man, "If it is not in *New and Nonofficial Remedies*, why is it not?" will find here the answer which that personage will no doubt hesitate to give him. The book shows the practical working out of the principles which the Council's

experience has shown to be essential in its fight for rationality in the field of proprietary medicines.

Among the products reported as unacceptable are: Bismogenol, which is bismuth salicylate under a fancy name; Desitin, a complex mixture from Germany; Hexo', a pine oil preparation for which unwarranted claims are made; Warnink's Advocaat, a mixture of potassium arsenite and alcohol in the form of an egg nog marketed without emphasis of the arsenic content in a way likely to lead to harmful and ill advised use by the public; and Solvo Aspirin, another futile attempt to market a solution containing acetylsalicylic acid rendered soluble by addition of sodium bicarbonate.

A glance at the index shows, however, that these reports do not always deal with articles that have been actually rejected by the Council. Preliminary reports are frequently made on new products which appear promising but for which there is not yet sufficient evidence to warrant inclusion in New and Nonofficial Remedies. Included in this group this year are: a report on Blueberry Leaf Extract, which gives promise of being useful in the treatment of diabetes; a report on "Plasmoquin," a substitute for quinine in the treatment of malaria brought out in Germany but thus far withheld from the market by the American agent; a report on "Alpha-Lobeline," which has been the subject of many conflicting estimates but which lacks conclusive evidence demonstrating its usefulness; two reports on Ephedrine, announcing standards, evaluating therapeutic usefulness, and finally announcing the acceptability of the drug and of two of its salts; a report on Bismarsen, a new derivative of arsenphenamine containing bismuth and proposed for use in the treatment of syphilis.

Of much current interest is the reprint of the report of Dr. R. A. Hatcher reviewing the literature on the Gwathmey method of colonic anesthesia and evaluating the present standing and usefulness of this method. This report is an outstanding example of the way in which the Council in addition to its other activities aims to contribute to the advance of general medical knowledge.

BOOKS RECEIVED

Handbook on Diet by Eugene E. Marcovici, M.D., formerly Assistant Professor von Noorden in Vienna; Instructor, Post Graduate Hospital, Assistant Attending Physician, Roosevelt Hospital, New York. The vital necessity of proper diet can hardly be overstressed in our modern strenuous times. Correct food preparation is of the utmost importance. With remarkable freedom from Food Fads and Hobbies, but in a truly practical and scientific manner, Dr. Marcovici herein presents every phase of the whole subject, including various diets in health and disease, special diets, recipes and mineral waters in clear comprehensive fashion.

Contains 323 pages. Price, \$3.50. Publishers: F. A. Davis Company, 1914-16 Cherry Street, Philadelphia.

Hay-Fever and Asthma, Their Cause, Prevention and Treatment, by Ray M. Balyeat, M.D., Instructor in Medicine and Lecturer on Allergic Diseases in the University of Oklahoma Medical School; Consulting Physician to St. Anthony's Hospital, and to the State University Hospital, Oklahoma City. Illustrated with 76 engravings with two in colors. Second Edition, revised and enlarged. Contains 310 pages. Price, \$3.50. Publishers: F. A. Davis Company, 1914-16 Cherry Street, Philadelphia, Pennsylvania.

Diabetes and Its Treatment by Insulin and Diet, a Handbook for the Patient, Fourth Revised and Enlarged Edition by Orlando H. Petty, M.D., Professor of Diseases of Metabolism in the Graduate School of Medicine, University of Pennsylvania; Physician in Charge of Department of Diseases of Metabolism, Philadelphia General Hospital. This little volume is in no way intended as a substitute for the Physician but is of real value to the patient in that it defines diabetes, gives the causes, suggests methods of prevention, and outlines in detail the diet to be followed. Contains 155 pages. Price, \$2.00. Publishers: F. A. Davis Company, 1914-16 Cherry Street, Philadelphia, Pennsylvania.

The New Pocket Medical Formulary with an appendix containing formulae and doses for hypodermic medication; posological table; obstetrical table; table of apothecaries' and Metric system of weights and measures, fractures, dislocations and sprains; treatment of asphyxia and apnea; poisons and antidotes; tables of differential diagnosis; diet lists for various diseases; the physicians interpreter in four languages by William Edward Fitch, M.D., late Major, Medical Corps, U. S. A., formerly lecturer on surgery, Fordham University School of Medicine. Fifth edition revised and enlarged. Contains 501 pages. Price, \$3.00. Publishers: F. A. Davis Company, 1914-16 Cherry Street, Philadelphia, Pennsylvania.

Nurses, Patients, and Pocketbooks, Report of a Study of the Economics of Nursing Conducted by the Committee on the Grading of Nursing Schools by May Ayers Burgess, Director; Wm. Darrach, M.D., Chairman; Mary M. Roberts, R. N., Consultant, Editor, American Journal of Nursing. Members: The National League of Nursing Education; The American Nurses' Association; The National Organization for Public Health Nursing; The American Medical Association; The American College of Surgeons; The American Hospital Association; The American Public Health Association, et al. Contains 618 pages. Copyrighted, 1928, by Committee on Grading of Nursing Schools. May

Ayres Burgess, Director, 370 Seventh Avenue, New York City.

Operative Surgery, by J. Shelton Horsley, M.D., F. A. C. S., Attending Surgeon, St. Elizabeth's Hospital, Richmond, Virginia. Third edition including a new chapter which treats of cicatricial contraction. One of the chief purposes of this book is the recognition and interpretation of the various biologic processes that attend and follow surgical operations. A knowledge of the causes of cicatricial contraction may help the operator to avoid this unfortunate sequel to his surgical technique. Contains 893 pages. 756 original illustrations. Price, \$15.00. Publishers: The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis, Missouri.

Modern Methods of Treatment, by Logan Clendenen, M.D., Associate Professor of Medicine, Lecturer on Therapeutics, Medical Department of the University of Kansas; Attending Physician, Kansas City General Hospital; Physician to St. Luke's Hospital, Kansas City, Missouri. Chapters on special subjects by H. C. Anderson, M.D., Carl O. Rickter, M.D., J. B. Cowherd, M. D., F. C. Neff, M. D., et al. Second edition. Contains 815 pages. Price, \$10.00. Publishers: The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis, Missouri.

Syphilis, a Treatise on Etiology, Pathology, Symptomatology, Diagnosis, Prognosis, Prophylaxis, and Treatment, by Henry H. Hazen, A.M., M.D., Professor of Dermatology and Syphilology, Medical Department of Georgetown University; Professor of Dermatology and Syphilology, Medical Department of Howard University. Contains 643 pages, 165 illustrations. Price, \$10.00. Publishers: The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis, Missouri.

A Handbook of Clinical Gynecology and Obstetrics, by Rae Thornton LaVake, A.B., M.D., F. A. C. S., Assistant Professor of Obstetrics and Gynecology, University of Minnesota. This volume is designed for the student, graduate or undergraduate, who is organizing his knowledge of countless gynecologic and obstetric methods, facts and opinions for purposes of practical application. Contains 281 pages, illustrated. Price, \$4.00. Publishers: The C. V. Mosby Company, 3523 25 Pine Boulevard, St. Louis, Missouri.

Epilepsy, Comparative Pathogenesis, Symptoms, and Treatment, by L. J. J. Muskens, M.D., of Amsterdam, Fellow of the Royal Society of Medicine, London; General Secretary of the International League against Epilepsy; foreword by Sir Charles S. Sherrington, M.D. The first part of this book deals mostly with the physiological problems involved in epilepsy, the second part with anatomo-

physiological research, while the third or clinical part is based on long experience, many cases having been followed up for twenty years or more. Contains 435 pages. Price, \$8.00. Publishers: William Wood and Company, 51 Fifth Avenue, New York City.

Bedside Diagnosis. By American Authors, edited by George Blumer, M.D., Clinical Professor of Medicine, Yale University, School of Medicine; Attending Physician to the New Haven Hospital. Three octavo volumes, totalling 2820 pages, containing 890 illustrations. Philadelphia and London: W. B. Saunders Company, 1928. Cloth, \$30.00 a set. Separate desk index volume free. W. B. Saunders Company, Philadelphia.

Clinical Diagnosis. Fifth Edition. By Laboratory Methods. A Working Manual of Clinical Pathology. By James Campbell Todd, M.D., Professor of Clinical Pathology, University of Colorado. Fifth Edition, Enlarged and Reset. Octavo of 762 pages with 325 illustrations, 29 in colors. Philadelphia and London: W. B. Saunders Company. Cloth, \$6.00 net. W. B. Saunders Company, Philadelphia.

Prevention of Blindness—A report of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association, published by the National Society for the Prevention of Blindness; second edition; revised; sixty pages; illustrated. Available at cost, National Education Association, 1201 Sixteenth Street, N. W., Washington, D. C., American Medical Association, 535 North Dearborn Street, Chicago, Ill., or National Society for the Prevention of Blindness, 370 Seventh Avenue, New York, N. Y. Price 35c net.

The Peaks of Medical History, an outline of the evolution of medicine for the use of medical students and practitioners by Charles L. Dana, A.M., M.D., LL.D., Professor of Nervous Diseases, Cornell University Medical College; Ex-President of the New York Academy of Medicine. Contains 105 pages with 43 full page plates and 16 text illustrations. Second edition. Publishers: Paul B. Hoeber, Inc., 76 Fifth Avenue, New York.

Schizophrenia (Dementia Praecox). An investigation of the most recent advances, as reported by the Association for Research and Mental Disease. The Proceedings of the Association; New York, December 28-29, 1925; Edited and Published in April, 1928. Editorial Board: Charles L. Dana, M.D., Thomas K. Davis, M.D., Smith Eli Jelliffe, M. D., Henry Alsop Riley, M.D., Frederick Tilney, M.D., Walter Timme, M.D. Contains 491 pages with 61 illustrations. Publishers: Paul B. Hoeber, Inc., 76 Fifth Avenue, New York.

COMMUNICATIONS

FAST WORK

To the Editor:

Enclosed find check for dues of Dr. W. G. Elliott, Cuthbert, Ga. He arrived here last Monday, the 2nd, we elected him at our regular meeting today, he will read a paper at our August meeting.

Dr. C. K. Sharp, President, was with us and made a fine talk.

With best wishes and my very best regards. I am,

Yours sincerely,
G. Y. MOORE, M.D.

Cuthbert, July 5, 1928.

MALTA FEVER

To the Editor:

In view of the fact that Malta fever is a comparatively rare disease in Georgia, and that the cow has not been proven immune to infections which infest goats, nor that *B. Abortus* (*Melitensis*) is not as pathogenic to man as *B. Brucelli* (*Melitensis*), there is a possibility that some of our obscure fevers heretofore undiagnosed may be Malta.

Mr. W. O. D. a well nourished, muscular man, weighing 175 pounds, age 37, married, a plumber, came to my office on May eighteenth with a history of fever, general malaise and cough for the preceding three weeks. Stated he was in bed the week before when his fever was much higher than at that time.—101, pulse 120, respiration 18. On physical examination heart and lungs were found normal, spleen enlarged, extending three inches below the costal border, urine normal, blood pressure 135/90. W. B. C. was 5400, with an increase in lymphocytes. Blood samples sent to the State laboratory were positive for *B. Melitensis*, weakly positive for typhoid, (He had typhoid when 14 years old) and negative for both paratyphoids, and several smears were negative for malaria, (as was the physiological test previously applied).

This man was in his first remission period when I first saw him. This lasted four or five days when his fever gradually went up to 104 in afternoons, with morning remissions to 102. This fever period lasted about ten days, during which time he had diarrhoea, cough, frequent profuse sweats, some pains in his feet, legs, and knees, but with it all his general appearance was not that of a very sick man.

He is now (June 29th) in the midst of his third wave of fever, having lost about 40 pounds in weight. His spleen and liver are markedly enlarged, and cough troublesome.

As for treatment, I have given him large doses intravenously of sodium cacodylate, neoarsphenamin, gentian violet, and mercurochrome without the slightest effect on his fever or other symptoms.

As Malta fever lasts from six to fifteen months I will be glad to give you a later report on this case.

The laboratory of the State Board of Health is

now making me some autogenous vaccines from cultures isolated from the blood of this case.

Very truly yours,

B. S. GOSTIN, M.D.

Macon, Ga., June 29, 1928.

LABORATORY APPROVED

Dr. George F. Klugh, Director

Laboratories of Drs. Bunce, Landham & Klugh,
139 Forrest Ave., N. E.,
Atlanta, Ga.

Dear Doctor Klugh:

It gives us pleasure to inform you that the Council on Medical Education and Hospitals at its recent meeting in Minneapolis voted unanimously in favor of the recommendation that your laboratory be placed on the approved list. This action of the Council confirms the tentative approval of which you have already been notified.

Very truly yours,

COUNCIL ON MEDICAL EDUCATION AND
HOSPITALS, A.M.A.

Per HOMER SANGER.

Chicago, June 28, 1928.

EMORY CLINICS

Annual Alumni Clinics, School of Medicine, Emory University, were held June the 4th to 8th, 1928. Registration was at the old College Building, Corner of Butler and Armstrong Streets.

The first day of the Clinics was given over to Class Reunions and Alumni Luncheon on the Campus, Clinics in the P.M. at Wesley Memorial Hospital. The rest of the week was held at Grady Hospital on Butler Street. The clinics were divided into operative ward walks and dry clinics. The clinics began at 8:30 A.M. and lasted until 4 P.M. each day, thirty minutes being given to each man on the program. There were only two men on the program for the dry clinics absent during the entire week. The attendance at the clinics was exceedingly good.

At the close of the clinic week the Annual Banquet was held, Henry Grady Hotel, June 8th, 7 P.M. The following addresses were given:

Doctor T. J. McArthur, President of the Alumni Association, Toastmaster. Dr. R. H. Oppenheimer, Dean of Medical School, "Emory." Doctor W. S. Elkin, Past Dean of Medical School, Reminiscences. Dr. H. Marshall Taylor, Alumni Address, "Otorhinologic Hygiene of Swimming." A delightful dinner was served and there were one hundred and forty four present.

The following officers were elected for the ensuing year:

Dr. T. C. Davison, Atlanta, Ga., President. Dr. L. M. Milford, Clemson, S. C., First Vice-President. Dr. Lee Rogers, Gainesville, Ga., Second Vice-President. Dr. M. C. Pruitt, Atlanta, Ga., Secretary and Treasurer. Trustees for three years:

Dr. E. M. McDonald, Dr. F. M. Sullivan, Dr. Floyd Rogers. Trustees for two years: Dr. M. T. Benson, Dr. W. A. Miller, Dr. J. F. Posey. Trustees for one year: Dr. Arch Avery, Dr. J. P. Bowdoin, Dr. C. W. Strickler.

M. C. PRUITT, Sec'y and Treas.

NEWS ITEMS

Regular staff meeting of the Davis-Fischer Sanatorium, Atlanta, was held on June 14. Drs. M. S. Equen and Frank K. Boland reported a case of Esophageal Obstruction; Dr. Trimble C. Johnson reported a case of Hidden Colonic Stasis; Dr. Olin S. Cofer read a paper on Procidencia Uteri.

Dr. W. H. Powell, formerly of Lumber City, has moved to Brunswick and purchased an interest in the hospital of Dr. W. M. Odum. In addition to their joint ownership of the hospital, they will be associated in the practice of medicine.

Dr. T. B. Miller, formerly of Richland, has moved to Omaha and will continue the practice of medicine at the latter location.

Dr. W. H. Goodrich, Augusta, was re-elected dean of the University of Georgia Medical Department, Augusta, at a recent meeting of the board of directors.

Dr. and Mrs. C. E. Pattillo, Decatur, visited many of the leading cities of Canada during the month of June and returned via Rochester and Minneapolis, Minnesota. Dr. Pattillo took post-graduate work at the Mayo clinic and attended the annual session of the A. M. A.

University of Georgia Medical Department, Augusta, celebrated its centennial on June 5th during its annual graduation exercises. Dr. L. G. Hardman, Governor, was honor guest, while Hon. Walter F. George, United States senator, was the principal speaker.

Dr. T. R. Aycock, Monroe, after spending several months in New Orleans at Tulane University of Louisiana School of Medicine taking a post graduate course, has returned and resumed the practice of medicine in his home city and community.

Dr. Newdigate M. Owensby, Atlanta, has returned from the convention of the American Psychiatric Association and Allied Societies at Minneapolis, and visiting clinics in Chicago and Rochester, Minnesota.

The American Psychiatric Association will hold its next annual convention in Atlanta in 1929.

Dr. R. L. Miller, Waynesboro, was elected president of the Alumni Association of the University of Georgia Medical Department.

The American Board of Otolaryngology held an examination at Minneapolis, June 11th. Forty-nine applications were examined, forty-six were

granted certificates. The Board will hold an examination in New York City, Friday, October 12 and in St. Louis, Monday, October 15th. Those wishing to come before the Board, please write Dr. W. P. Wherry, Secretary, 1500 Medical Arts Building, Omaha, Nebraska.

Dr. James F. Pitman, formerly of Atlanta, has accepted a position on the staff of the John D. Archbold Memorial Hospital, Thomasville.

Dr. Lawson Thornton announces the opening of a Fracture and Orthopedic Clinic at the Piedmont Hospital, corner of Crew and Crumbley Street, Atlanta. Dr. Michael Hoke, consultant.

Dr. M. A. Fort, Bainbridge, Commissioner of Health for Decatur county, received the degree of Doctor of Public Health conferred upon him by the University of Georgia Medical Department, Augusta, at its recent commencement exercises. Dr. Fort submitted a thesis on "A Comprehensive Investigation of Hookworm Conditions in Georgia." He is the author of two booklets, "The County Cup-Ups" and "Songs and Sermons."

Dr. and Mrs. R. L. Carter, Thomaston, entertained the members of Thomas and Upson Counties Medical Societies at their home on June 15.

The Tri County Medical Society held its second quarterly meeting in Arlington June 13. Dr. Paul Eaton, Augusta, read a paper on "Public Health;" Dr. W. J. Cranston, Augusta, the "Internist;" Dr. H. J. Baker, Augusta, "Pediatrics;" Dr. V. E. Powell, Atlanta, "Asthma." Dr. C. K. Sharp, Arlington, President of the Association, was host to the physicians at a dinner given at the Hotel Arles.

Dr. J. F. Arthur announces the removal of his office from 478 Peachtree Street to 105 Forrest Avenue, N. E., Atlanta.

The Third District Medical Society held its forty-second semi-annual meeting at Cordele on June 27. The following titles of papers were on the program: Treatment of Chronic Purulent Otitis Media by A. G. Fort, Atlanta; X-Ray as an Aid in Diagnosis by Robert C. Pendergrass, Americus; The Paranasal Sinuses as Foci of Infection by Taylor S. Burgess, Atlanta; Teaching the Diabetic How to Live by Seale Harris, Birmingham, Alabama; The Significance of Sugar in the Urine by T. E. Rogers, Macon; Acidosis in Diabetes by Jno. W. Daniel, Savannah; address by C. K. Sharp, Arlington, President of the Association; Report of Councilor by G. Y. Moore, Cuthbert, Councilor for Third District.

We have been advised that there is an excellent location for a physician at Denmark, South Carolina, a town of about 2000 inhabitants. For further information address, P. O. Box 173, Denmark, South Carolina.

OBITUARY

Dr. George Washington Julian, Member, Tifton; Southern Medical College, Atlanta; aged 71; died May 29, after an illness of several months duration. Dr. Julian was born and reared in northwest Georgia. He began the practice of medicine at Pearson where he acquired a large and lucrative practice. He moved to Tifton after the Georgia Southern and Florida Railroad was built, continuing his practice there and with Messrs. Love and Buck opened a private bank which merged with the Bank of Tifton. Dr. Julian was a member of the Baptist church. Surviving him are his widow and three children. Funeral services were conducted from the residence of Elder George C. Gibson and interment was in Oak Ridge Cemetery, Tifton.

Dr. William White Evans, Oxford; University of Georgia Medical Department, Augusta; aged 83; died May 27 at a private hospital in Atlanta. He was born at Wrightsville and began the practice of medicine in 1870. Dr. Evans was one of the most successful physicians of his community and had numerous friends throughout Newton county. Surviving him are his widow, one daughter, Mrs. Goodyear of Emory University, and one son, Haygood Evans of Oxford. Funeral services were conducted by Rev. W. H. LaPrade of LaGrange, et al, from the Allen Memorial church at Oxford. Interment was in the Oxford cemetery.

Dr. Henry Hager Martin, Member, Savannah; Miami Medical College, Cincinnati, Ohio; aged 60; died June 12 at his home. He was born in Ashland, Kentucky, and educated in the public schools of his home town. Dr. Martin moved to Savannah more than 25 years ago and became one of the leading physicians of that city. He was held in high esteem in private and professional life. Dr. Martin was a member of the Georgia Medical Society, the American College of Physicians, the American Medical Association and ex-President of the Southern Medical Association. Surviving him are his widow, two sisters and three brothers. Funeral service were conducted by Rev. David C. Wright from the residence and interment at Ashland, Kentucky, his former home.

Dr. Samuel G. Ethridge, Member, Sparks, University of Georgia Medical Department, Augusta, Georgia, 1889; aged 66; died June 16th at his home of paralysis. Dr. Ethridge practiced in his home community for thirty-five years and was an active supporter of Sparks College. He was a member of Cook County Medical Society and the Methodist church. Surviving him are his widow, two sons, Frank and James Ethridge; one daughter, Miss Eleanor Ethridge.

Dr. Eugene A. Harris, Member, Sandersville, Atlanta College of Physicians and Surgeons, 1899; aged 52; died very suddenly at his home on June

18. He was reared in Sandersville and held in high esteem by the people of his community. Dr. Harris had recently took post graduate work in the Rockefeller Foundation Institute. He was a member of the Washington County Medical Society, and Masonic Lodge. Surviving him are his widow, two daughters, three brothers and one sister. Funeral services were conducted from the residence by Rev. C. C. Davison and interment in Brownwood Cemetery at Sandersville.

Dr. J. Lee Byron, Member, Jackson, Emory University school of Medicine, 1887; age 78; died at his home on June 18 after an illness of two years duration. He was reared in Carroll County and taught in the public schools for several years. Dr. Byron located in Jackson after receiving his degree in medicine and was an active practitioner until his health failed. He was well known as a business man and served for many years as a director of the Jackson National Bank. Dr. Byron served many years as the efficient Secretary of the Butts County Medical Society. He was a member of the Jackson Baptist church. Surviving him are his widow, one son, Henry Lee Byran of Macon and one granddaughter.

THE PARANASAL SINUSES IN NON TUBERCULAR PULMONARY INFECTION

(Continued from page 291)

only when there seemed no possibility of benefiting them by conservative treatment.

Second: Ethmoids and antra were involved in all of the cases.

Third: The two cases in whom the best results were obtained were those in whom the history of pulmonary trouble was shortest. This seems to strengthen the argument for sinus pathology as an etiological factor in lung suppuration; and shows that the time to attack the sinus disease is early in the condition, and not late, after there has been extensive destruction of pulmonary tissue.

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Balance of Bibliography omitted for lack of space.

NEW INSTRUMENTS

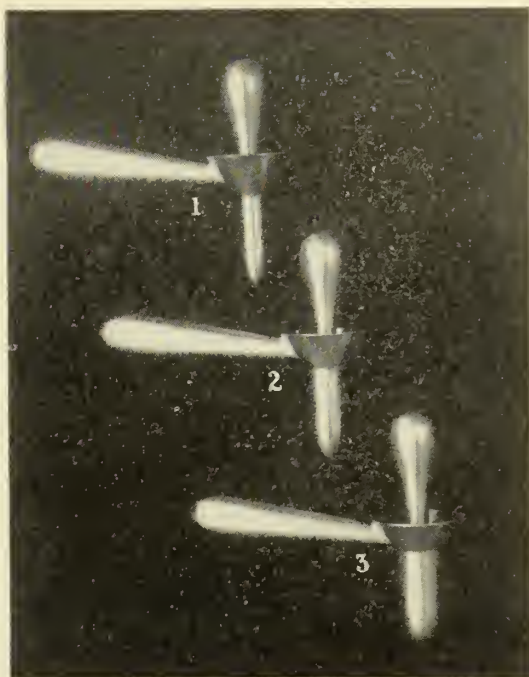
MARION C. PRUITT, M.D., F.A.C.S., F.R.C.S.

PROCTOSCOPES—The type of proctoscope which has been found most useful and effective by the author in the examination and injection treatment of internal hemorrhoids, is Pruitt's proctoscope. It is 4 c.m. in length, cylindrieal in form and made in three sizes— $1\frac{1}{2}$, 2 and $2\frac{1}{2}$ c.m. in diameter, well fitted with a handle of sufficient length to afford a firm grip with the hand. The proximal end is funnel-shaped and is $2\frac{1}{2}$ c.m. in length which helps reflect the light into the proctoscope and is continuous with the body. The terminal end of which is smooth and does not have a cutting edge. It is well fitted with an acorn-shaped obturator. The body is straight and the diameter of the proximal and distal ends are the same.

Kelley's proctoscope is a similar type but conical in shape, 5 c.m. in length, the terminal end being $2\frac{1}{2}$ c.m. in diameter. The proximal end is much larger. This conical shape admits more light which means better direct exposure of the protruding parts into the lumen of the terminal end. This proctoscope has the disadvantages: First. It is easily expelled from the rectum because of the conical shape if the patient should strain during the examination or treatment. Second. The proximal end being much larger gives more discomfort to the patient because of its increasing size in proportion to the terminal end in which the exposed parts protrude in the lumen.

Other proctoscopes. Hirsehman's anascope which is made in three sizes which has a slope of the distal end, or Bickerhoff's which has an opening in the side, only exposes a partial view (one side of the wall) of the rectum at a time and must be changed or reinserted to expose the entire circumference of the anal canal or the lower part of the rectum.

The chief advantage of the author's proctoscope is: First: The straight body which makes it easily held in position. Second: The whole area of the circumference of the lower part of the rectum and anal canal pro-



Pruitt's Sphincterscope, 4 c.m. in length, straight
Three sizes: $1\frac{1}{2}$, 2, and $2\frac{1}{2}$ c.m. in diameter

trudes into the lumen simultaneously, exposing all tumors so that treatment may be given without removal of the proctoscope. There is considerable swelling immediately following injection. The smaller piles are injected first for the reason that the swelling of the large tumor might obstruct the view of the smaller ones and prevent all tumors being injected at the first sitting. The length of the proctoscope is sufficient to expose the pile bearing area, but short enough to bring the operator closer to the operative field and gives better light and shortens the distance that must be traversed with the hypodermic needle and syringe.

PROCEEDINGS OF THE HOUSE OF DELEGATES

(Continued from page 313)

by Ex-Presidents, Secretaries of the respective counties or laymen from whom medical history may be obtained must be filed with the Councilor, the Councilor forwarding it to the Chairman of the Sub-Committee or the Secretary-Treasurer of the Association. The Councilor's duty shall be to have each of his county secretaries to use every means at his command to obtain all of the valuable medical

history since the organization of the county. If the Secretaries, Councilors and Ex-Presidents will do their duty we will be able to compile a medical History that will be of great interest especially to the medical men of Georgia and all interested in the History of Georgia.

"We desire to have the material in hand in time to make a report to the House of Delegates at Savannah next May."

Many favorable replies were received in answer to this communication although many of the Committee failed to reply.

Another meeting of the Sub-Committee was called at the office of the Chairman on February 9, 1928, for the purpose of acting upon replies which had been received from the General Committee. Present at this meeting were Boland, Bunce, and Thrash, J. L. Campbell having been invited to counsel with us. After reviewing the letters which had been received from the General Committee and discussing the matter at length, the Sub-Committee decided as follows: That different phases and periods of the History of Georgia should be delegated respectively to the doctors and groups of doctors best fitted to handling each phase and each period with the proviso that the General Committee could make such changes and modifications as it might desire.

"Drs. Bunce, Campbell, and Weaver of Atlanta, were appointed to compile data from 1732 to 1825.

"Dr. Boland was made Chairman of a Committee, the members of which he is to select, to compile data from 1825 to 1865.

"Dr. Phinizy Calhoun was appointed to write the History of Medical Schools in Atlanta.

"Dr. Bassett was made Chairman of a Committee, the members of which he is to name himself, to compile Public Health Data.

"Dr. Stewart Roberts was made Chairman of a Committee to write the History of Medical Education in Georgia.

"Dr. Clark was made Chairman of a Committee, the members of which he is to select, to write the Medical History of Macon.

"Dr. Bowdoin was made Chairman of a Committee to write the History of Northwest Georgia.

"Dr. McCurry of Hartwell, was made Chairman of a Committee to write the History of Northeast Georgia.

"Dr. Walker of Cairo was made Chairman of a Committee to write the History of Southwest Georgia.

"Drs. Mulherin and Lewis of Augusta were assigned the duty to arrange for the writing of the History of Medicine in Augusta and also the History of Medical Schools in Georgia except Atlanta.

"Dr. Myers was made Chairman of a Committee, the members of which he is to select, to write the Medical History of Savannah."

On April 20, 1928, the Chairman sent out the following letter to the General Committee:

"It will be necessary for us to make a report to the House of Delegates upon the progress of activities in arranging for compiling the Medical History of Georgia.

"This report will be tentative, the purpose of which is to give the House of Delegates some basis upon which to act.

"The decision as to whether or not it would be advisable to carry out this project will be based upon our reports.

"Give a brief outline of what you will be able to do. It will not be necessary for this report to contain any subject matter.

"Also express your opinion upon the advisability of continuing this work."

Replies were received from practically all of the Committee, most of them encouraging, the only discouraging letter was from Dr. Phinizy Calhoun who stated he saw no good that might be derived from preparing a history of Georgia. The consensus of opinion was that the History should be written, and each one showed a willingness to do what he could to carry out this work.

Your Committee already has in hand some data, and the individuals who have been delegated to the respective departments have much of their material ready. It is not possible to carry out this work though without sufficient funds to pay expenses which as a minimum would be something like \$500 and \$1,000 would be better. This money is at present not available, and the only way it can be made available is to raise the membership dues of the Association. We, therefore, request that this Committee be continued and in the meantime it pledges your Honorable Body that the work will be continued pursuant to the completion of the History, and as soon as funds are available compilation will be begun. We beg further that you give this Committee power to act except in expenditures of the Association's funds and that this be done only under the direction of the House of Delegates.

E. C. THRASH, Chairman.

Dr. Thrash moved the adoption of this report. Motion seconded and unanimously carried.

(Continued in August issue)

Medical Association of Georgia

Next Annual Session, Macon, Ga., May 8, 9, 10, 1929

OFFICERS

| | |
|--|--|
| President-----C. K. Sharp, Arlington | Second Vice-President--M. Hines Roberts, Atlanta |
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| First Vice-President---W. E. McCurry, Hartwell | Parliamentarian-----M. A. Clark, Macon |

DELEGATES TO THE A. M. A.

| | |
|--|--------------------------------------|
| Wm. H. Myers (1928-30)-----Savannah | E. C. Thrash (1928-30)-----Atlanta |
| Alternate, Wm. A. Mulherin-----Augusta | Alternate, C. W. Roberts-----Atlanta |
| A. H. Bunce (1927-29)-----Atlanta | |
| Alternate, Wm. R. Dancy-----Savannah | |

COUNCIL

| | |
|----------------------------------|-------------------------------|
| M. M. Head, Chairman-----Zebulon | C. L. Ayers, Clerk-----Toccoa |
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Councilors

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| 1. Wm. H. Myers (1930)-----Savannah |
| 2. J. A. Redfearn (1930)-----Albany |
| 3. G. Y. Moore (1930)-----Cuthbert |
| 4. O. W. Roberts (1930)-----Carrollton |
| 5. E. C. Thrash (1931)-----Atlanta |
| 6. M. M. Head (1931)-----Zebulon |
| 7. M. M. McCord (1931)-----Rome |
| 8. H. M. Fullilove (1931)-----Athens |
| 9. C. L. Ayers (1929)-----Toccoa |
| 10. S. J. Lewis (1929)-----Augusta |
| 11. A. S. M. Coleman (1929)-----Douglas |
| 12. J. Cox Wall (1929)-----Eastman |

Vice-Councilors

| |
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| 1. C. Thompson (1930)-----Millen |
| 2. R. F. Wheat (1930)-----Bainbridge |
| 3. Chas. A. Greer (1930)-----Oglethorpe |
| 4. W. H. Clark (1930)-----LaGrange |
| 5. W. A. Selman (1931)-----Atlanta |
| 6. J. M. Anderson (1931)-----Barnesville |
| 7. W. H. Perkinson (1931)-----Marietta |
| 8. Paul L. Holliday (1931)-----Athens |
| 9. J. K. Burns, Jr. (1929)-----Gainesville |
| 10. H. D. Allen, Jr. (1929)-----Milledgeville |
| 11. K. McCullough (1929)-----Waycross |
| 12. Austin L. Smith (1929)-----Cochran |

COMMITTEES

Scientific Work

| |
|--|
| Wm. A. Mulherin, Chairman (1928)-----Augusta |
| C. W. Roberts (1928)-----Atlanta |
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Public Policy and Legislation

| |
|--|
| Chas. E. Waits, Chairman (1931)-----Atlanta |
| J. W. Palmer (1929)-----Ailey |
| A. R. Rozar (1930)-----Macon |
| C. K. Sharp, President-----Arlington |
| A. H. Bunce, Secretary-Treasurer-----Atlanta |
| T. F. Abercrombie, Commissioner of Health, State of Georgia-----Atlanta |

Medical Defense

| |
|---|
| M. A. Clark, Chairman (1933)-----Macon |
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| E. C. Thrash (1931)-----Atlanta |
| M. M. Head, Chairman Council-----Zebulon |
| Allen H. Bunce, Secretary-Treasurer-----Atlanta |

Hospitals

| |
|---|
| C. S. Lentz, Chairman (1933)-----Augusta |
| B. T. Wise (1929)-----Plains |
| Geo. F. Klugh (1930)-----Atlanta |
| Julian K. Quattlebaum (1931)-----Savannah |

Abner Wellborn Calhoun Lectureship

| |
|---|
| James E. Paullin, Chairman (1933)-----Atlanta |
| G. B. Smith (1929)-----Rome |
| E. E. Murphey (1930)-----Augusta |
| Craig Barrow (1931)-----Savannah |
| Frank K. Boland (1932)-----Atlanta |

Necrology

| |
|--------------------------------------|
| E. C. McCurdy, Chairman-----Shellman |
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|-----------------------------|
| R. L. Miller-----Waynesboro |
| O. H. Weaver-----Macon |

Health and Public Instruction

| |
|--|
| Theodore Toepel, Chairman (1929)-----Atlanta |
| Paul Eaton (1930)-----Augusta |
| V. H. Bassett (1931)-----Savannah |
| C. K. Sharp, President-----Arlington |
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Cancer Commission

| |
|--------------------------------------|
| J. L. Campbell, Chairman-----Atlanta |
| Chas. Usher-----Savannah |
| C. K. Wall-----Thomasville |
| G. Y. Moore-----Cuthbert |
| C. A. P. Ebbert-----Grantville |
| A. R. Rozar-----Macon |
| R. M. Harbin-----Rome |
| M. B. Allen-----Hoschton |
| C. D. Wheelchel-----Gainesville |
| G. T. Bernard-----Augusta |
| W. F. Reavis-----Waycross |
| J. C. Wall-----Eastman |
| E. L. Bishop-----Atlanta |

Fraternal Delegates to Other State Meetings

To visit Alabama: R. F. Wheat, Bainbridge; J. C. Patterson, Cuthbert.

To visit Florida: K. McCullough, Waycross; Gordon Chason, Bainbridge.

To visit North Carolina: Paul L. Holliday, Athens; Hal M. Davison, Atlanta.

To visit South Carolina: V. P. Sydenstricker, Augusta; C. H. Richardson, Jr., Macon.

To visit Tennessee: Trammell Starr, Dalton; R. C. Maddox, Rome.

HISTORY IN THE DIAGNOSIS OF PULMONARY TUBERCULOSIS

(Continued from page 319)

winter colds, infectious diseases, and, last but not least, pleurisy—whether dry or with effusion, the latter being considered practically pathognomonic in these cases.

Family history of tuberculosis; if so, at what age did exposure occur.

Contact—whether in family or otherwise.

Social History of Adults.

1. Marital.
2. Venereal disease.
3. Employment—past and present.
4. Habits.

A history thus taken will give one a comprehensive view of the case; enable one to correlate symptoms, and thus make the physical examination with greater assurance and accuracy for diagnosis.

WOMAN'S AUXILIARY

(Continued from page 320)

Public Relations—Mrs. E. H. Cary, Dallas, Texas.

Revision of By-Laws—Mrs. Morris Fishbein, Chicago, Illinois.

SPECIAL APPOINTMENTS

Auditor—Mrs. C. W. Roberts, Atlanta, Georgia.

Historian—Mrs. E. V. De Pew, San Antonio, Texas.

COMMITTEE ON HEALTH FILMS

Chairman—Mrs. John O. McReynolds, Dallas, Texas.

COMMITTEE ON RESOLUTIONS

Chairman—Mrs. J. N. Hunsberger, Norristown, Pennsylvania.

COMMITTEE ON CREDENTIALS AND

REGISTRATION

Chairman—Mrs. James N. Brawner, Atlanta, Georgia.

SPECIAL ADVISORY COMMITTEE

Mrs. C. S. Red, Houston, Texas.

Mrs. Seale Harris, Birmingham, Alabama.

a President-Elect and provision for the nomination of Councilors by the respective district societies. One important amendment was introduced which will lie over until next year before it is voted upon—that of raising the dues to ten dollars instead of five as at present. The report of the Finance Committee (Council) showed that it has become necessary either to raise the dues else to omit some of the present activities of the Association—all of which the Committee felt should be continued.

CHRONIC APPENDICITIS

We published in the June issue of Journal correspondence between Dr. J. A. Redfearn of Albany, and Dr. Richard C. Cabot of Cambridge, Massachusetts, on the subject of "Chronic Appendicitis." In view of the many diagnoses of "Chronic Appendicitis" the reply of Dr. Cabot furnishes much food for thought. He covers the entire subject in a very few words. Both physicians and surgeons would do well to consider his words carefully before making another diagnosis of "Chronic Appendicitis." Incidentally, there was an interesting paper presented by Drs. John B. Carnette and Russell S. Boles of Philadelphia before the Section on Gastro-Enterology at the recent meeting of the A. M. A. in Minneapolis on "Fallacies Regarding So-Called Chronic Appendicitis" which will be published in the Journal of the A. M. A.

WANTED

Laboratory Technician wants position; doctor's office preferred. Can do all routine laboratory work, including blood chemistry, Wassermann, tissue and bacteriology.

R. C., Box 166, Rochmart, Ga.

CONSTITUTION AND BY-LAWS CHANGED AT ANNUAL SESSION

Two important changes were made in our Constitution and By-Laws: the provision for

**AWTRY & LOWNDES
FUNERAL DIRECTORS
AMBULANCE SERVICE**

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

DEVOTED TO THE WELFARE OF THE MEDICAL PROFESSION OF GEORGIA
PUBLISHED MONTHLY under direction of the Council

Volume XVII

Atlanta, Ga., August, 1928

No. 8

SALVAGE*

EUGENE E. MURPHEY, M.D.

Augusta

An old Carolina mountaineer is credited with having recently said, "The good old days is gone, and everything that made 'em good went with 'em;" and while I do not come before you with quite such a citrus point of view as that, it has occurred to me that it might be well to consider the changes which have taken place and which are still continuing in the profession of medicine, and to analyze and to discuss them among ourselves.

Every thoughtful practitioner or teacher of medicine, will concede that the whole aspect of things medical is in a state of continuous flux and change. Our own relationship to the facts of medicine, to our confreres and to our clientele, is undergoing a rapid and complex metamorphosis; but surely, underneath it all, we should be able to discern some tendencies which will be continuous, and some basic principles which should withstand and defy change.

I sometimes think that with the rapid mechanization of our civilization, many of the edifices which we thought enduring will inevitably be torn down and be replaced by a somewhat different type of structure, differing in design, and differing in function.

It may even be, that the House of Medicine as we older men have known it, must inevitably be dismantled, remodeled, and even rebuilt, in order to enable its inhabitants to live conformably to an altered environment; and just as in the dismantling of an old and spacious domicile the owner and the architect make a critical survey of the premises in order to ascertain what there is that holds too much of value, or of beauty, or of charm, to be thrown away or forgotten, so might it

be well if we survey the present status of our domain and ask ourselves what salvage there may be.

We should consider first, the disintegrating factors which are at work, weigh their effect upon our efforts and our lives, upon our very methods of thought and feeling.

First of all, to my mind, as an element of change, comes the mechanization of our lives, the abolition of time and distance resulting from motor transportation and improved roadways which first made it possible, but now inexorably demands, that the volume of work done by the practitioner be greatly increased. One might have imagined that these facilities would have brought leisure and time for contemplation to us—instead, they have caught us in a mesh which means only more work, more calls, more out-of-town consultations, so that we bend ourselves with increasing effort and devotion, to the tasks which have only multiplied with our means of accomplishing them.

Yet, unless we realize that the standard of our work must be held up; if we content ourselves with doing a larger—an incredible—volume of work, because our transportation permits it—the science and the art of medicine is furthered not one particle.

Small good will our motors or our airplanes do us, if they but increase the cruising radius of haste and incompetence.

Somewhere there must be found time for thoughtful consideration of the problems which the day has brought us, for sifting and weighing the data which we have collected, or which our internes or assistants have collected for us, for the reading of our journals and for the perusal of our books which march down upon us in serried ranks from the press, threatening to overwhelm us by the sheer force of numbers, as the barbarian hordes marched down upon and overwhelmed Rome. Nor can reading and thinking be delegated to any secretary, aid, or amanuensis—it must

*Read before the Chattahoochee Valley Medical and Surgical Association, Warm Springs, Ga., July 10, 1928.

ever remain a matter of personal concern and responsibility.

Can we not devise some method of salvaging the time for thought and for reflection?

The rapid and inevitable increase of special and limited practice is worthy of thoughtful analysis. Conceding as we all do that it is a necessary and progressive step in the development of our relationship to the public, we may yet ask ourselves what changes it is bringing to pass—what disadvantages, if any, attach to its development, in what direction will it probably evolve.

The field of medicine is now so extensive a thing, the accretions of highly specialized knowledge accumulate with such amazing rapidity, that no human brain, however competent or versatile, can furnish all the aids which are available to the sick. So that we perforce turn to that division of labor which specialization permits, in the hope that more highly skilled, though necessarily narrower vision, may see with a clearer light the problems which baffle and perplex us.

Yet the esteem in which the specialist is held, the reputed emoluments and distinction which are supposed to be his lot, tempt many immature minds to assume a certain knowledge, which can not be gained save by extensive clinical experience and years of preparation and study.

There should be some method by which the profession through its governing or advisory bodies should be able to discourage, or at least defer, immaturity in the pursuit of its dream—to determine by some test such as we use with watermelons—whether or not the brain be ripe.

And the general admission of the need for highly technical knowledge in medicine has built up in the mind of many competent general practitioners an overwhelming modesty, and a distrust of their own valid and oft-tried attainments amounting to almost to a complex, so that in many cases which they are perfectly qualified to diagnose and treat, they can not be content until their suffering patient has made the round of a hospital or two or gone through one or more group-medicine mills.

Surely the intelligent self-respect and the self-reliance which was so engaging and so

valuable a trait of the country or small-town doctor of the past, should be salvaged and kept intact for generations to come.

The delegation of certain fields of endeavor formerly purely medical to other allied agencies, has wrought a definite change in our methods of thought. Formerly, the physician was largely the guardian of the health of the families which placed themselves under his care, their guide in all matters hygienic, but now with the sharp line of cleavage between the practice of medicine and the teaching and administration of public health, we have expressly or tacitly, delegated to the health officers many functions and responsibilities which were formerly our own.

This may not be viewed as an unmixed blessing—too often is the health officer too deficient in clinical training and experience to visualize his problems from the point of view of the practitioner, or even to realize that the physician is entitled to any point of view whatever regarding health matters, with resulting friction, misunderstanding and sometimes mutual recrimination.

In addition to the line of cleavage referred to between the health officer and the physician, there has arisen a perfect swarm of volunteer and lay health organizations, each usually well staffed with a highly paid corps of officials and subordinates whose function, so nearly as I can see, consists chiefly in assuming authority and responsibilities which can conceivably properly belong only to the medical profession or to recognized Federal, State, County or Municipal health officials.

These workers constitute a particularly pestiferous and objectionable group, in that they have, in the main, had no adequate medical training or experience, are generally doctrinaire enthusiasts each with his own pet scheme for bringing in some especial hygienic millennium; and in many instances requesting or demanding that the measures proposed, instituted or directed, be carried out, gratis, by an already over-worked medical profession.

Let us at least as a part of our plan for Salvage retain the interest in public health problems which once was our own, despite the fact that their administration has been delegated to properly constituted authorities, and let us not forget that in maintaining this

interest it should be incumbent on all of us, to aid the health officers in every way that lies within our power. The prompt and accurate filing of birth and death certificates, the report of weekly case incidence records of reportable disease, the furthering of public interest in preventive medicine, typhoid inoculation, toxin-antitoxin and smallpox vaccination crusades, need but to be mentioned to illustrate some of the ways in which we can show a helpful interest in public health and lighten the burden of the Health Officer. Professional indifference to public health administration is a curse which cries loudly to be lifted, at least in Georgia.

Time was when the practice of medicine was considered as a learned profession, but it would seem that unless we carefully mark our course and set our house in order, we will soon be in no better state than are today, the law and the clergy.

The trend of modern medical education toward a rigid and inflexible standardization with increasingly long periods of medical school and hospital work, has resulted in the almost universal shortening of the period allotted to the student in which to secure the fundamentals of a liberal education before his entry into the medical school, and while we are quite conceivably turning out graduates who know more of the theory of medicine than ever before, it is also quite possible that we are at the same time turning out young men who know less about the classics, the arts and sciences than at any time in the whole history of medical education.

Nor has the attitude of the self-appointed authorities on medical education—the Educators, if you please—helped the Profession in this impasse in any degree whatever, since they have in their wisdom seen fit to decide that neither Latin nor Greek is requisite in the pre-medical years.

This folly, for such I conceive it to be, is already bearing fruit in the increasing difficulty which students show in mastering their medical vocabulary and in learning either to write or speak intelligibly in the terminology of their chosen profession.

Could we not find time in talking to our young friends or relatives who are about to enter upon the practice of medicine to im-

press upon them the importance and the necessity of as good an education as they can possibly attain being a pre-requisite to practice, and to hold before them, such vestiges as we may have of a once existent scholarly idealism?

Is it not quite possible, that one reason why the profession is plagued so greatly by cults and fads, quacks and charlatans, is that we have permitted ourselves in too many instances to sink to the cultural level of osteopaths and chiropractors?

We of the South have been taunted for many years with provincialism, in that we were content and satisfied to spend our lives in the remote fastnesses of the back-woods, or in our small and somnolent towns; but now a changing spirit of the times leads many of our best young men, after they have accepted an expensive medical education, to transfer themselves and their professional activities to alien and, they hope, wider and more remunerative fields, with a resulting loss to Georgia and Alabama where they are sadly needed to replace those of us who must through age, or death, or retirement lay down our burdens.

Can we not salvage a little of the glorious provincialism which made our fathers feel that this was their own State and its people their own people, and which sent them home to the place of their nativity to begin and to carry on the work to which they devoted their lives?

Not many years ago there was a great wave of enthusiasm and work for organized medicine. The knitting together of County Societies into competent State organizations, the amalgamation of all these into the American Medical Association required years of thoughtful and continuous effort. The passing by our legislatures of better medical practice acts, required much strenuous attention and activity, but then it seemed as if the Profession heaved a vast sigh of relief over the completion of a great accomplishment, and decided to let the matter continue under its own momentum.

Perhaps our attention has been engaged unduly by the multiplicity of medical organizations of a more highly specialized character, and in the pursuit of the agreeable activities which our Societies of internal medicine

or surgery, or what not offer, we have been beguiled somewhat away from our first enthusiasms.

Let us take thought and remember that the things which organized medicine has done in America derive from the County Society, the State Association and the A. M. A., and save for them our first and most special enthusiasms and zeal.

And now for a moment, a brief and flitting moment, I should like to rush in where angels fear to tread.

In the rapidly approaching feminization of America there have arisen countless organizations, auxiliaries to what were originally purely professional or scientific bodies.

Speaking purely for myself, I have not yet attained the age, and will not I trust for several decades, when to find myself surrounded on all sides by feminine pulchritude will have any other effect upon me than to quicken my pulse, raise my blood-pressure, interfere with my power of concentration and disturb my lucubrations.

Speaking for others, how many of us are able to recall the joyous boys of yesteryear who for three or four days would find in attendance on their Medical Society, a surcease from the grind of professional life and from the stern, unremitting joys of domesticity? Today we see them, dim and faded simulaera of their former selves, their songs are silent and their quips are still; in fact, they bear the same resemblance to their former selves as does the dead shell of the cicada, clinging to the oak tree on the lawn outside, to the singing insect which quit it long ago.

Perhaps our former point of view was clearly expressed by an old negro who used to be a gun bearer for me when I hunted duck along the Carolina coast. His wife reprimanded him bitterly, in my presence, because though living only a short distance away, he had never permitted her to accompany him on any of his frequent trips to Charleston, and he defended himself as follows: "Dr., I'm a God-fearin' man and I neber flies in de face ob de ordinations of Providence, and Providence 'as ordained two things long ago. Providence 'as ordained dat man and dog is constitute to go 'broad, and dat ooman and eat constitute for stay home."

GEORGIA'S HEALTH PROBLEMS*

T. F. ABERCROMBIE, M.D.

Atlanta

Under the head of "Georgia's Health Problems," I shall discuss two problems only—Brill's Disease and the Convalescent Typhoid Carrier. In presenting this data, credit is due Mr. T. F. Sellers, Director of the State Board of Health Laboratories, as I shall quote almost entirely from data furnished by him.

Brill's disease, or American typhus fever, has probably been in existence in the southeastern states and along the Atlantic seacoast for many years. It is somewhat similar clinically to the old world typhus, although not so severe. It is rarely fatal.

The laboratory diagnosis of this disease dates with the advent of the Weil-Felix test. Prior to this time diagnosis was made only by the clinical picture. Certain bacteria of the proteus group show agglutination with the sera of most cases of both old world typhus and Brill's disease. One particular strain of proteus designated as X19 is very constant in this property. After the suspected disease has run for several days, blood is collected preferably in liquid form and the serum subjected to the agglutination test. The State Board of Health Laboratory has been making the Weil-Felix test for several years on request. In 1927, however, the test was adopted as a routine procedure with all specimens of liquid blood submitted for typhoid or paratyphoid blood cultures. In a series of about 800 specimens submitted for general laboratory examination, 75 gave positive Weil-Felix tests. In many instances, Brill's disease was not suspected until the positive test was obtained. We consider that the results of the work in 1927 justify not only the continuation of the routine test, but also an investigation as to the distribution and status of the disease. No doubt many cases are never diagnosed.

A study of the geographical distribution of 53 cases occurring in 1927 has been made as follows:

*Read before the Medical Association of Georgia, Savannah, Ga., May 9, 1928.

| County | No. Cases of Brill's |
|------------|-------------------------|
| Seminole | 6 |
| Decatur | 1 |
| Thomas | 3 |
| Brooks | 1 |
| Ware | 2 |
| Wayne | 1 |
| Coffee | 2 |
| Appling | 5 |
| Jeff Davis | 1 |
| Dougherty | 2 |
| Terrell | 1 |
| Sumter | 1 |
| Candler | 1 |
| Laurens | 4 |
| Bibb | 1 |
| Troup | 4 |
| Fulton | 14 |
| Gwinnett | 1 |
| Hall | 1 |
| Burke | 1 |

It should be noted that all of these counties are in the southern three-fifths of the State with the exception of Fulton, Gwinnett, and Hall. These figures do not include the cases in Chatham which were diagnosed by the Savannah laboratory. Nearly 90 cases occurred in Chatham County in 1927, according to the statement of Dr. V. H. Bassett, Health Officer. From these figures it is obvious that Brill's is confined largely to the southern part of the State.

Dr. K. F. Maxey of the United States Public Health Service is now working on the problem of Brill's, particularly from the standpoint of transmission. Old world typhus is known to be transmitted chiefly through the agency of the body louse and possibly the head louse. It is also known to exist only among those classes of people who make no practice of personal hygiene. Brill's disease, however, occurs among all classes of people and there is no evidence to incriminate the body louse in the spread of this disease. Careful search has been made in hundreds of cases for body lice, with negative results, except in one or two instances. Doctor Maxey is, therefore, investigating other ectoparasites. The rat flea is now being studied. It is an interesting fact that the majority of cases occur among adults who live or work in large build-

ings suitable for infestation with rats. The problem is yet unsolved. The laboratory will continue to assist Doctor Maxey in the collection of data. Physicians are, therefore, requested to have the Weil-Felix test made on all cases of prolonged fever, whether Brill's is suspected or not.

The test is very specific, especially when a high titer agglutination is obtained. Specimens should be collected in the ordinary keidel Wassermann outfit and about 5 c.c. of blood should be collected under sterile precautions. This is very easy since the keidel tubes are carefully sterilized before being sent out and it is only necessary to prepare the skin properly in order to obtain a sterile specimen. In addition to the Weil-Felix test, agglutination tests for typhoid and paratyphoid, tularemia, Malta fever, and the Wassermann test for syphilis can be made on this same specimen. Except on special request, however, only the test for Brill's, typhoid, and paratyphoid are made routinely. The blood clot is cultured in every instance. Therefore, the advantages of submitting the specimen in the keidel tubes are many.

The physicians of Georgia are invited to co-operate with the State Board of Health in this work. The laboratory is fully equipped to make the Weil-Felix test as well as the various types of blood cultures for clinically related diseases.

THE CONVALESCENT TYPHOID CARRIER

Our Bureau of Vital Statistics received reports of 639 deaths due to typhoid fever in Georgia in 1927. This represents a mortality of 20.2 per 100,000 population. During the year 1927, there were 260 deaths from diphtheria, or 8.2 per 100,000; 277 deaths from malaria, or 8.7 per 100,000; 276 deaths from dysentery (including infantile diarrhea), or 8.7 per 100,000. There were more deaths from typhoid fever than from both diphtheria and malaria combined. The national typhoid rate for 1925 was 8.0 per 100,000. It is hardly fair to compare the typhoid rates in a southern state with those of the entire registration. In the South conditions for the existence of enteric diseases are naturally more favorable than in the North. The Negro population, especially in Georgia, presents an added prob-

lem. Other factors of an economic nature also contribute to the relatively higher typhoid rates. When we realize, however, that the Georgia rate for 1924 was 22 per 100,000, while the national rate was only 6.7, the Georgia rate being more than three times greater—in spite of the climatic and other factors referred to above, this difference is too great. There has been, however, a considerable decline in typhoid morbidity during the past ten years in Georgia.

A number of factors account for this decline:

1. Improved medical treatment of the individual case.
5. Terminal disinfection more intelligently practiced by both the physician and the family.
3. Improved sanitation of water and food supplies.
4. Vaccination.
5. Education of the people along general hygienic lines.

Each of these factors has contributed to some extent. The rate of decline, however, is lessening and threatens to become stationary. Without relenting in the practice of these agencies, we must search for new angles of attack.

There is one factor with which we are more or less familiar but which we have been prone to neglect—namely, the detection and control of the typhoid carrier.

In regard to the transmission of typhoid fever, there are two kinds of carriers—the temporary convalescent and the chronic healthy carrier. Both types together are said to be responsible for 50% of all cases. Either directly or indirectly, they are probably responsible for every case. It would be impossible, in the light of our present information, to estimate the relative importance of these two types. The classic "typhoid Mary" type furnishes more dramatic interest because of the trail of circumstantial evidence which such a carrier leaves behind. Circumstantial evidence must be augmented with positive laboratory findings to be conclusive. A few such carriers have been confirmed by the Georgia State Board of Health Laboratory. Many more probably exist. According to Nichols, 80% of all chronic healthy carriers are women.

Our own limited observation bears this out. Those discovered in Georgia have been women engaged in the handling of foods—two, I recall, were dairy workers; one a professional family cook, etc. No doubt all of you have in mind many instances in your experience of recurrent typhoid in the same family or house, year after year. Many such reports come to our attention, but it is not often feasible or possible to conduct the proper type of investigation. In addition to the chronic healthy carrier, some of whom carry the infection for years or even a lifetime, there is the temporary healthy carrier, that is, a person who presents a negative or doubtful history of an active attack, but who excretes virulent bacilli for a short time only. This type is hard to detect, but is very dangerous, and is probably responsible for many mysterious typhoid outbreaks which come and go before any solution is found by investigation. If the true facts were always available, it would be found that all healthy carriers, chronic or temporary, would present histories of mild or severe acute attacks. In other words, all carriers have probably at one time had typhoid fever, either severe or too mild to require medical attention and diagnosis.

Assuming this to be true, then all chronic or temporary healthy carriers were at one time convalescent carriers. Therefore, if it were possible to control the convalescent carrier, we could thereby lessen, if not eradicate, all other kinds of carriers.

Many municipal and state boards of health are recognizing the importance of convalescent carrier control, and a few are already requiring laboratory check ups on every case of typhoid fever. The usual practice is to require two successive negative stool and urine examinations on every case before it is dismissed from quarantine or medical observation. Is there any real reason why this can not be done in Georgia? I am not advocating a state board of health law or regulation to this effect, at least, not yet. But I would like to announce that in the future your State laboratory which is now in the process of rebuilding will be ready to offer this service to the physicians and health officers. Special containers, of which I have a sample to show you, will be furnished upon demand free of

charge. Directions for use will be found in the containers. I see no reason why any physician who has the best interest of his community at heart should not see to it that two negative laboratory reports on both stool and urine are obtained before dismissing a case of typhoid.

Nichols says, "The greatest need in carrier work at present is the intelligent co-operation of medical men in making a workable synthesis. Too often the bacteriologist knows only his germs, the physician knows only his patient, and the sanitarian knows only the gross situation in the field. Each tries to construct the whole story from his own point of view and as a result the literature contains many assertions, half truths and guesses, which hinder real progress. The only way to improve is for all concerned to get closer to the realities and to co-operate with mutual self-restraint."

DISCUSSION ON PAPER OF DR. ABERCROMBIE

Dr. V. H. Bassett, Savannah: I listened with great interest to this paper and think he presented two problems that are probably more important than any other health problems we have. He could have discussed what his twenty-seven counties are doing, and what the whole department is doing in education, but in presenting these specific problems I think he has done great service. I wish to emphasize his statement that the presentation of the data he has given us has been made possible by the work in the State Laboratory, under the direction of Mr. Sellers. The excellent tests on typhoid which he advocates are also made possible for the profession in the State Laboratory, by the extension of that work.

I will be brief in my discussion of Brill's disease for Dr. Maxey is with us and I hope he will discuss it. I am greatly interested in this because, as the Doctor told you, we have had ninety cases in this County and fifty-three in the rest of the State. I believe the reason we have so many cases recorded is because we have been looking for them and testing for them longer than other places in the State. It is true that the first recorded case was reported by Dr. Paullin of Atlanta, in 1914. We had a case reported in 1915, and in 1911 we had a death from spotted typhus fever, the diagnosis made by Dr. Elliott. I made a post-mortem and excluded typhoid and other diseases. The history was that the man had never been out of Chatham County, that

he had had no contact with typhus, and therefore it could not have been typhus. It was a fatal case of the Brill type. We have had many cases, at first with one death in seventy-five. Since 1922 we have been making routine Weil-Felix tests. When I first showed the cases, Dr. Frick was unconvinced but later Dr. Maxey's work convinced him that we had the disease here that Dr. Brill discovered in New York. I think the disease has been present for fifteen years. It is increasing in amount and virulence. We had six deaths last year to one in 1915. That is almost the mortality of typhoid fever. Two of these cases could not be differentiated in course and appearance from typhus fever. They occurred in a vigorous man in the middle of life, and in a boy about ten years old. So we have a disease that when first reported had a death in only about one of 200 cases, and while it may be mild, it may assume a serious character.

In regard to typhoid fever, I might call Dr. Abercrombie's attention to the fact that the State Board of Health does provide already for the examination of carriers. It states that all must have examination of stools and urine, and two successive negative cultures. I do not think any one has done that yet because we have not had the laboratory service, but with the extension of the State work and the State Laboratories we hope to do that. I think the examination of carriers should be the last thing we do in the control of typhoid fever. We get more results from controlling the patients and the excretions, and in the control of the food and water supply. Afterward, the control of carriers, of course, will bring the percentage further down.

Dr. Paul Eaton, Augusta: Since Dr. Abercrombie has limited his remarks to two diseases, and since Dr. Bassett and Dr. Maxey are far better prepared to discuss typhus fever than I am, I shall confine my remarks to that portion of Dr. Abercrombie's paper which deals with typhoid fever.

In the first place, we must arrive at some understanding as to what we mean by a "convalescent" carrier as distinguished from a "healthy" or a "chronic" carrier. Logically, there may be in the case of typhoid fever, as in the case of diphtheria, a "contact" carrier who acts for a short time as a mere mechanical vector of the disease. Practically this is hardly possible, as we see the matter. Every healthy or chronic carrier must have been at some time a convalescent carrier. Where shall we draw the line? Is it necessary to draw a line? The use of the term "convalescent carrier" may be entirely justified for the purpose of indicating that a per-

son has but recently recovered from typhoid fever, and there would be little gain in establishing a convention whereby the "convalescent carrier" would be promoted to the dignity of a "healthy" or "chronic carrier" after so many days. The suggestion of Dr. Abererombie, that typhoid patients should not be discharged from observation until free from virulent organisms, is entirely rational, and the adoption of such a requirement by the State Board of Health would be a marked step in advance. The ordinary rule in the case of diphtheria, the requirement of negative reports on two successive days, would not in our present state of knowledge be sufficient in the case of typhoid fever on account of the well known cyclic character of the discharged typhoid organisms. The technic of the matter remains to be worked out.

In 1900 the death rate from typhoid fever for the registration area of the United States was more than thirty-five per 100,000. From Dr. Abererombie's remarks it will be seen that the present condition in Georgia is better than the average was twenty years ago, but there is room for improvement.

There is another factor in the spread of typhoid fever to which Dr. Abererombie did not refer, although he is only too well aware of it. In 1925, 33 per cent of all the typhoid fever cases reported in the State of Georgia were fatal. Now we all know that this disease is attended by no such mortality. From 8 to 12 per cent seems to be the usual range. For every thirty-three deaths in those days there must have been about 330 cases, 230 of which were not reported. Until the profession can be depended upon to report more than one-third of the cases, I am afraid we can not hope for the improvement which we so urgently need.

Dr. K. F. Maxcy, Public Health Service, Washington, D. C.: It is my honor to be associated with Dr. Bowdoin and Dr. Abererombie and Mr. Sellers in the study of typhus, and we have been making some observations in Alabama. The disease is not only present here in Georgia, but also in Alabama, and has recently been reported from a number of places in Florida, as well as along the coast in South Carolina, in Virginia, in Baltimore and New York. The primary problem we set ourselves was to ask the question whether this disease with which we are dealing in the United States was really typhus. I think we have made enough progress on that part of the problem to report.

The disease cannot be distinguished clinically from typhus, it gives the same serological reaction, the Weil-Felix reaction—which so far as we can be certain—is specific for ty-

phus. We have discovered one clue as to its identity which I think is fallacious. The disease here reacts in animals, as does Mexican typhus. It is different from the Old World typhus. It is a New World, North American typhus, which is different than the type in the Old World. The second thing was to discover what its form of transmission is. We feel uneasy because they have such advanced epidemics in the Old World and we wonder what we may expect in the United States. The epidemiology studies, I think, rule out quite definitely the louse in the transmission of the disease in this country. If it is not the louse, what is it? We do not know, but we have a lead which we hope will prove of some value.

I wish to emphasize one or two things Dr. Abererombie said in regard to the diagnosis. One is in regard to the Weil-Felix reaction. In that test and in the Weil the results are much more dependable if some serum can be sent in rather than a drop of blood on a slide. The Weil-Felix reaction is simply confirmatory, as it does not appear until late in the disease, usually about the tenth to the fourteenth day, when the patient is getting well. I think these are the essentials.

Dr. T. F. Abercrombie, Atlanta (closing): I am glad Dr. Bassett brought out the fact we have the rule and regulation stating that two negative stools and urinalyses should be obtained before releasing the patient from observation, but the physicians have not done this as yet, and we do not feel like enforcing this state-wide, but we do want your co-operation. If we can do that we can certainly lower the rate in a way we have not done, as the rate we have now is too high by far.

LATE RESULTS FROM TRYPARSAMIDE THERAPY IN NEUROSYPHILIS

On the basis of his experience and a review of results after the lapse of from five to six years, W. F. Lorenz, Madison Wis. (*Journal A. M. A.*, April 21, 1928), urges that every case of syphilis of the central nervous system be treated energetically. Tryparsamide and mercury offer a convenient and remarkably effective treatment. It is necessary to select cases in making a choice of tryparsamide, other arsenicals, malarial inoculation or other therapy of proved value. In the instance of tryparsamide, an extensive trial should be made before the drug is discarded. There are now many patients who have enjoyed health and efficiency for periods of from five to six years as the result of treatment with tryparsamide and mercury. These are largely cases that would have otherwise, without doubt, passed on to hopeless chronicity and death.

PRIMARY PULMONARY ASPERGILLOSIS*

ERNEST F. WAHL, M.D.

M. J. ERICKSON, M.D.

Thomasville

Described first by Hughes Bennett in 1842, pulmonary aspergillosis is a disease occurring often enough to justify the interest of the profession.

It is impossible to determine the exact number of cases recorded, as many of the early reports, especially in the German literature, utilize confusing nomenclature and lack sufficient evidence definitely to classify them as pulmonary aspergillosis. Many reports contain only autopsy findings with some histological facts, and give no clinical data. In all, about fifty-four cases have been reported, of which eleven are probably primary.

CASE HISTORY

Mrs. W. L. S., white married woman, 39 years of age, was admitted to the John D. Archbold Memorial Hospital, Nov. 9, 1926, complaining of coughing and wheezing.

PRESENT ILLNESS

On Sept. 29, 1926, the patient brushed a heavy growth of mould from a pair of damp shoes. She recalled distinctly that she inhaled dust from the friable, dry growth. That night she complained of shortness of breath and coughing, but the most distressing symptom was wheezing. Each day thereafter the coughing and wheezing became more severe. These symptoms were worse at night and prevented rest. There was no expectoration until Oct. 8, nine days after the onset of the illness, when small round masses which resembled lumps of gray gelatine were raised. On one occasion, after a severe paroxysm of coughing, the sputum was streaked with blood.

Although tubercle bacilli were never found in the sputum, a diagnosis of pulmonary tuberculosis was made independently in two different clinics. Most of the sputum was raised early in the morning before arising. The patient always felt better on cold days and often noted a substernal sense of suffocation when the weather was warm and damp. For two days prior to admission during each paroxysm of coughing she had experienced prickling sensations over the precordium.

PHYSICAL EXAMINATION

The patient was a well developed, well

nourished white woman with the facies of one who was weary. Breathing was of the asthmatic type and severe paroxysms of coughing occurred in rapid succession. Examination of the thorax revealed normal expansion. The percussion note was of a slightly higher pitch over the left supra-spinous fossa than over the right. Elsewhere the note was normally resonant. The diaphragm descended equally well on the two sides. Over each front many rhonchi were palpable. Tactile fremitus was equal on the two sides. The breath sounds over the entire chest were high pitched and wheezing with prolonged expiration and accompanied by all types of dry rales. A few scattered medium moist rales were heard. The voice sounds were transmitted normally.

Otherwise the general physical and neurological examination revealed nothing abnormal.

LABORATORY DATA

The phthalein test of kidney function, after intramuscular injection, showed 25% excretion the first hour and 17.5% the second hour. Chemical study of the blood showed normal amounts of non-protein-nitrogen, sugar and uric acid.

Examination of the blood revealed 4,110,000 R. B. C.; 10,600 W. B. C.; hemoglobin, 70%. The differential formula was 57% polymorphonuclear neutrophils; 6% eosinophils; 4% transitionals; and 33% lymphocytes. The red blood corpuscles appeared normal.

The blood Wasserman reaction was negative. Repeated examinations of the stools and urine showed nothing abnormal.

Roentgenographic studies demonstrated no abscess of the teeth. There was slight mottling of the upper lobes of the lungs. It was impossible to say whether this was due to tuberculosis or pneumomycosis. Dr. F. H. Baetjer and Dr. Charles R. Austrian of Baltimore, did not think the appearance of the films justified a diagnosis of pulmonary tuberculosis.

The sputum was tenacious on admission but after the administration of iodides it became watery and contained gray gelatin-like masses the size of a French pea. Mycelia were found in fresh preparations. Small amounts of elastic tissue and occasionally long acid-fast rods, not unlike certain forms of tubercle bacilli, were found in the earlier specimens. Repeated cultures and subcultures revealed a heavy growth of aspergillus. Dr. Chas. Thom, U. S. Department of Agriculture, identified the organism as *aspergillus flavus*.

PROGRESS

On admission the coughing was controlled by small doses of codeine. On one occasion adrenalin, Min. X, was administered to relieve the wheezing. Although the wheezing ceased,

*Read before the Medical Association of Georgia, Savannah, Ga., May 9, 1928.

such a severe general reaction developed that the treatment was not repeated. Following the isolation of the aspergillus in the sputum, six daily intravenous injections of sodium iodide (20 c.c. of a 10% solution) were given. Improvement of the pulmonary condition was noted after the first injection. After the sixth injection the lungs were clear. The subjective relief that followed the administration of the sodium iodide was striking, sleep in the recumbent position was possible, expectoration ceased and the substernal discomfort disappeared.

The patient was discharged with instructions to take potassium iodide by mouth during three weeks of each month.

After leaving the hospital, the patient felt unusually well except for slight substernal discomfort following exertion. The eating of candy and similar sweets gave a slight sensation of substernal fullness but all other respiratory difficulties disappeared.

On Jan. 19, 1927, ten minutes after a moderate amount of exercise and a drink of one ounce of blackberry wine, a severe asthmatic attack developed and lasted for two hours. On other occasions the same wine had caused no untoward effects. A second series of six intravenous injections of 120 c.c. of a 10% solution of sodium iodide was given at weekly intervals.

The second and third injections were followed by a slight sense of substernal constriction and a paroxysm of coughing which lasted about five minutes. During the ensuing two hours in each instance, several small, hard masses were expectorated but unfortunately these were not saved.

Repeated examinations of the lungs since discharge from the hospital 18 months ago have disclosed no signs of asthma. Occasionally, a few medium moist rales have been heard over the upper lobe of the left lung. For 12 months the patient has been asymptomatic, she has regained her strength and has led a normal life. There is no expectoration.

Roentgenographic examination on Dec. 19, 1927, showed slight irregularity of the right diaphragm, some accentuation of the hilus shadow and very slight fibrosis of the upper lobes.

There has been no fever since the onset of the infection. Since the patient's departure from the hospital it has been impossible to obtain sputum for examination.

HISTORICAL

For many years following the report by Bennett² of pneumonomycosis in a tuberculous lung, the condition was considered an accidental secondary infection. In 1847, Shuy-

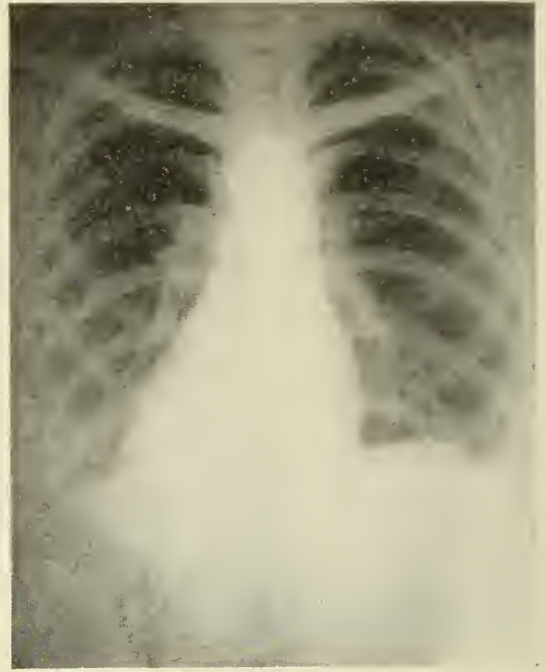


Figure 1
Slight fibrosis of apices on admission

ter reported a case of mycosis which Renon later interpreted as a primary infection, and Gairdner²², in 1853, demonstrated the growth of a fungus on the pleural surface of a tuberculous lung with pneumothorax.

Virchow (56), in 1856, was the first to identify definitely as aspergillus, the organism of pneumonomycosis in the human lung. He reported four cases in association with other diseases, and considered it solely a secondary invader. In the same year, Friedrich¹⁹ reported a case of cirrhosis of the liver with pulmonary aspergillois and thrombosis due to fungous growths in the right subclavian vein and the pulmonary artery.

Conheim¹⁵ described two cases in 1865 but his histological studies were meager. Popoff⁴⁵ discovered a case in 1872 and performed a number of experiments with fungi recovered from human lungs.

In 1876, Furbinger²¹ published a report of three cases of pulmonary aspergillois in patients who had died from other diseases. He considered the possibility of the aspergillois being primary and suggested that in some instances pulmonary infarction might furnish a suitable soil for the implantation of the aspergillus.



Figure II

Increased fibrosis of upper lobes thirteen months later

Rother⁴⁹, in 1879, cited a case which he considered secondary but the clinical picture he detailed corresponded well with many known cases of primary infection. The patient was a woman 58 years of age who complained of chills, fever, pleurisy and hemoptysis. There was infiltration of the left apex and aspergilli were found in the sputum.

Shubert⁵¹ recorded the case of a woman 75 years of age whose posterior naso-pharynx was filled with a mass of fungi. The respiratory disturbance was completely relieved by the mechanical removal of the mass. He considered the fungus, *aspergillus*.

Osler⁵³, in 1886, reported a case, the outstanding feature of which was the expectoration of small, whitish-gray nodules the size of a bean. Examination of the sputum revealed *aspergillus glaucus*. It is interesting to note that Osler considered eight to ten definite cases reported up to that time.

By the injection of spores of *aspergillus* into the auricular veins of rabbits, Kidd²⁸ was able to produce, in three to four days, an abundant growth of the fungus in many organs, especially the kidneys.

In 1888, Hildebrandt²⁶, described the formation of tubercles in pulmonary aspergillo-

sis by the defensive gathering of leucocytes, lymphocytes and macrophages.

Dieulafoy, Chantemesse and Widai¹⁶ made the first scientific study of the disease in 1890. They reported three cases, and stated that pleurisy, hemoptysis and bronchitis are usual symptoms. They noted the occurrence of the infection in pigeon-feeders who are accustomed to take a mixture of water, millet seed and vetch seed in their mouths and blow it into the mouths of the pigeons. After the experimental production of aspergillosis in laboratory animals, these scientists advanced the view that aspergillar pneumomycosis in the human lung could be either primary or secondary.

In 1891, Potain³⁶, recorded a case occurring in a pigeon fancier, and the following year Boyce (5), in his report of a case of primary aspergillosis, compared the pathological findings in that case to the lesions of madura foot and actinomycosis. In 1895, Podack⁴⁴ stressed again the fact that pulmonary aspergillosis could develop as a primary infection.

Arkle and Hinds¹, in 1895, discussed a case of primary infection, that developed in a farm laborer 22 years of age. The outstanding symptoms were progressive shortness of breath, cyanosis, paroxysmal orthopnea, and pulmonary emphysema. Death occurred four months after the onset of the symptoms. Wheaton⁵⁵, in 1896, observed a primary case in a child of two years who died from pneumonia after an illness of twenty-seven days.

Renon⁴⁷, in 1897, published a monograph on the subject, in which he gave a complete bibliography. He described three cases of his own and discussed several other cases he had seen, but that had been reported elsewhere. He noted the occurrence of the disease in hair sorters as well as in pigeon feeders. Hair sorters work in an atmosphere heavily charged with rye flour to remove the grease from the hair. Five of the six pigeons exposed to the same atmosphere died after a few days from pulmonary aspergillosis, and *aspergillus* grew in cultures of the rye. He established experimentally that the condition can be primary. In his experience, the *aspergillus* was difficult to isolate from the sputum of chronic cases. He stated that early in the disease hemoptysis occurs more frequently than it does in pul-

monary tuberculosis, and even though there is a tendency to live a long time, the chances for a cure are remote. In one of his cases the aspergillois which was primary subsided and at a later date the patient suffered from pulmonary tuberculosis.

In 1897, Koekel²⁹, asserted that the condition was usually primary, an opinion that was contrary to the one accepted generally. Obici⁴², in the same year described infection of the lung with aspergillus in a syphilitic patient and he believed that syphilis created a favorable soil for the growth of the mould.

In 1900, Saxer⁵⁰ published a monograph on pneumomycosis due to aspergillois. He recorded four cases of his own, of which two were primary. In one case the infection occurred 13 days after a laparectomy, but after ten weeks the fever, cough, and expectoration ceased. Saxer used guinea pigs, rabbits, cats and dogs in his experimental work. He reached the conclusion that primary aspergillois of the human lung could occur and strenuously objected to the term "pseudotuberculosis" used by the French, since the infection is in no way related to tuberculosis. In Saxer's opinion any disease of the lungs may furnish a fertile soil for the secondary implantation of aspergillus. He also discussed two cases reported by Bostroem, and one each by Hertereich, Folkenheim, Frohmann, Lichtheim and von Ernst. The case of von Ernst occurred in a diabetic.

Holden²⁷, in 1915, described a case of pulmonary and glandular mycosis due to aspergillus nidulans. This case was treated first as tuberculosis and later as Hodgkin's disease. The aspergillus was isolated from the sputum and from sections of a gland. Weakness, dyspnoea, cough, and pain in the right shoulder were the principal clinical manifestations. The sputum was scanty and never contained blood. Although the cervical and axillary glands were enlarged, they were freely movable and not tender. This case is similar to the one reported here in that the patient spent the summer prior to the onset of her illness in a damp, warm climate where mould frequently grew upon the shoes and clothing.

In 1923, Gardey²³ recorded a case of primary pneumomycosis caused by aspergillus

fumigatus, occurring in an Argentine boy of 15 years. The illness, which was of two months' duration, was characterized by progressive asthenia, anorexia, fever, sweats, cough, dyspnoea, and pain in the right side of the chest. At the onset the sputum was scanty, light green in color and contained small bodies resembling grains of rice. Later, the sputum was purulent and streaked with blood. Physical examination and roentgenographic studies showed the lesion was limited to the base of the right lung and the overlying pleura. Gardey considers aspergillus fumigatus more virulent than aspergillus niger. He states also that without treatment the disease will produce "phthisis of an aspergillar type." Under iodide therapy the fever should disappear in 15 days with complete recovery in sixty days.

The secondary infection of a gunshot wound of the chest by aspergillus fumigatus was reported by Cleland¹³ in 1924. The first case of respiratory aspergillois in Peru was described by Lopez³⁴ in 1924. The patient was a farmer, aged 30, who slept usually on the floor of a building used for storing grain. The illness began with pain radiating down the course of the right sciatic nerve, paræsthesia of both legs, and anæsthesia of the distal third of the right leg. Following this there were signs of nasal obstruction and the discharge of a foul smelling purulent secretion which contrasts rather sharply with the odorless gangrene of the lungs which commonly has been found. Aspergillus was found in crusts removed from ulcers in the nose and pharynx. The blood showed moderate anemia. This was the first recorded instance of examination of the blood in this disease. He attributed the peripheral neuritis to the aspergillus toxin described by Bodin and Gautier³, which has a selective action on the nervous system, sometimes producing paralysis and convulsions. The lungs in this case were unaffected.

Mieres³⁹ and Castrillon¹¹, in 1925, each reported a case of acute primary pulmonary aspergillois, with complete recovery following the administration of iodide.

Macaigne and Nigaud³⁶, in 1926, found a primary infection in a woman 71 years of age who had died in a crisis of suffocation. The pulmonary artery was completely occluded by

a thrombus made up of a fungus mass which followed the smaller arteries to their terminal branches. In many places the mycelium perforated the walls of the vessel with resulting gray hepatization, emphysema, and formation of cavities. Later³⁷, these investigators prepared an antigen from a culture of *aspergillus* grown from the sputum of patients who had pneumomycosis. They injected the antigen into four types of individuals, (a) normal, (b) those with acute pulmonary tuberculosis, (c) some who had chronic pulmonary tuberculosis, and (4) patients with pulmonary aspergillosis. Normal individuals and those suffering from acute pulmonary tuberculosis reacted negatively. There was a slight reaction in an individual with chronic tuberculosis but re-examination of the sputum revealed many tubercle bacilli and a few mycelium of *aspergillus*. In pulmonary aspergillosis there developed a local reaction and a reaction in the aspergillar focus in the lung. The local reaction resembled that caused by tuberculin in tuberculosis. Further work³⁸ on a second case which was clinically primary, revealed the fact that aspergillosis unlike sporotrichosis, does not provoke the development of agglutinins. The fixation reaction was also negative.

In 1926, Lapham³², reported the finding of 10 cases in three years. Case reports were not given and she did not state whether they were primary or secondary. She was of the opinion that many cases of aspergillosis would be found if all cases of pulmonary tuberculosis were also studied for pneumomycosis. A review of the literature does not corroborate her statement that asthmatic manifestations are of frequent occurrence, unless cough, all forms of dyspnoea, pulmonary emphysema, and cyanosis be classified as asthmatic phenomena. She raised the question as to whether or not asthmatic patients who reacted negatively with all tests except those made with dust, might not owe their reactivity when tested with the latter to spores present in the dust.

In a group of sixty-one patients who were suspected of having pulmonary tuberculosis, Brown⁷ found one case of aspergillosis. Other cases have been reported by Chiureco¹², Castellani⁹, and Greely²⁴.

ETIOLOGY

At first, aspergillosis was considered a secondary infection of a saprophytic nature, occurring in pigeon fanciers and hair sorters. Later, it was shown that any person coming in contact with grain or decaying vegetable matter, especially millers and farmers, was subject to infection. *Aspergillus* belongs to the family Perisporeacea. *Aspergillus fumigatus* has been demonstrated to be the most common cause of aspergillar pneumomycosis, although infection has occurred with *A. niger*, *A. glaucus*, *A. flavus*, and *A. nidulans*. Castellani⁸ and Chambers¹⁰ have given excellent detailed descriptions of the fungus, and its cultural characteristics. The spores are found commonly on various kinds of vegetable matter, grain and in dust. The growth of the fungus is luxuriant in tropical and subtropical climates but is not uncommon in the temperate zone especially in damp regions. No instance of pulmonary aspergillosis has been reported from the colder climates.

Infection occurs from inhalation of the spores. Mendelson⁴⁰, in a general discussion of the subject, considered pneumomycosis and pulmonary tuberculosis alike in their routes of mode of infection, pathology and prognosis. He intimated that infection through the gastro-intestinal tract occurred frequently. Unlike actinomycosis and blastomycosis, aspergillosis of the gastro-intestinal tract is rare, although Bostroem isolated aspergilli from a peri-caecal abscess.

Of the other sites of aspergillar infection, the external auditory canal is undoubtedly the most frequent. Keratomycosis is occasionally encountered while *aspergillus* infection of the skin is not uncommon in tropical countries. An extensive growth of the fungus has been found in the kidneys of patients dying from pulmonary infection. Herterich, Lopez and Shubert have each encountered a case of aspergillosis limited to the upper respiratory passages. Emile and Weil¹⁷ reported seven cases of aspergillosis of the spleen occurring in a series of 16 cases of splenomegaly. The clinical picture resembled Banti's Disease in three cases. One patient was well two years after splenectomy. Oberling⁴¹ thinks that splenic mycosis is secondary to some other diseases in that organ.

PATHOLOGY

The pathological picture of the affected lung tissue is that of inflammation, suppuration, and necrosis. The lesions belong to the class of granulomata. A typical lesion is an area of necrosis in the center of which the fungus may be found. The focus on gross examination sometimes resembles the lesion of actinomycosis. The infection is often limited to the apex of one lung and the tubercle can be differentiated from the lesion of tuberculosis only by microscopic study. In progressive cases, the expectoration of necrotic material leads frequently to cavity formation. There may be one large cavity containing an odorless, necrotic substance or the cavity may be completely filled with a spongy fungous mass. Sometimes the walls of the cavity are covered with a greenish-gray velvety growth. In other instances the lungs are so riddled with small cavities that they are described as "sieve-like." Secondary invasion of the infected areas by putrefactive bacteria apparently does not occur, as "odorless gangrene" of the lungs has been described as characteristic since the disease was first known.

In cases characterized by dyspnea, the lung tissue may show areas of gray hepatization surrounded by a zone of emphysema, and thrombosis of the vessels leading to the part. These consolidated areas tend to break down, forming cavities. In the case of Arkle and Hinds, the lungs were so emphysematous and so studded with small cavities that they resembled flesh colored sponges. Bronchiectasis and pneumothorax are encountered, the former being more frequent.

In chronic cases, the pleura becomes thickened, and in some instances the pleural cavity is obliterated by adhesions. Not infrequently, the fungus penetrates the lung and grows upon the visceral pleura. Old and recent pericarditis have been found at autopsy.

Interstitial pneumonia and tubercle formation often occur in the cases which are cured clinically. In such cases death may result later from failure of the right side of the heart.

Thrombosis of the pulmonary vessels was found by Friedreich¹⁹, Kohn³⁰, Macaigne and Nigaud³⁶ and in three of Saxer's series⁵⁰. According to Lord³³, metastatic distribution of

the fungi has never been noted in man, but has been produced experimentally in animals.

At autopsy, the co-existence of aspergillosis and tuberculosis has been found often in the lungs.

SYMPTOMS

Pulmonary aspergillosis occurs as a primary and as a secondary infection. The primary type may be acute or chronic.

The onset of the acute infection is usually abrupt with pleurisy, cough, fever, chills and night sweats. Dyspnea may occur early in these cases, and sometimes it is an outstanding symptom, as it was in the case reported herewith. Paroxysmal attacks of dyspnea sometimes occur only at night, but they may be initiated by any slight exertion. Hemoptysis may be an early symptom in the acute cases. Fatigue, anorexia and loss of weight follow. Although usually the physical signs are those of acute bronchitis, areas of consolidation have been found early in the course of the disease. In the case reported here, the findings were typical of those to be noted in any acute asthmatic attack. In the case of Castrillon¹⁰, noisy wet rales obscured all other sounds.

The course of chronic primary aspergillosis is similar to that of chronic pulmonary tuberculosis. Often there is a history of asthenia, malaise, undernutrition, early morning cough and mild recurrent attacks of pleurisy, extending over a number of years. Digestive disturbances are usual. As the disease progresses, the cough becomes more distressing and the quantity of sputum increases. Progressive shortness of breath on exertion and occasional nocturnal paroxysms of dyspnea then occur. Areas of consolidation with cavitation and increasing fibrosis of the lungs result in emphysema and cyanosis, sometimes of an extreme degree. Macaigne and Nigaud³⁶ found one case dying in a crisis of suffocation. Hemoptysis may occur early in the chronic cases but is more common in the later stages when cavities have formed. The hemorrhage may be profuse and fatal. Although some cases run an afebrile course, fever, chills, and sweats are prone to occur late in the chronic type. Progressive interstitial pneumonia usually leads to death from cachexia and failure of the right side of the heart.

Physical signs of consolidation, cavitation and bronchitis are found. Pneumothorax and secondary empyema have occurred in advanced cases. Boggs⁴ suspects the presence of pneumomycosis in any case of basilar bronchitis, of obscure causation, which resists ordinary therapeutic measures.

Secondary pulmonary aspergillosis is by far the most common form. In such cases, tuberculosis is the usual primary condition. In the cases reported as secondary to pneumonia, sufficient proof is lacking that the entire process was not caused by the aspergillus. Either tuberculosis and aspergillosis may be primary or secondary, each creating a fertile soil for the secondary implantation of the other. Isolation of the tubercle bacilli, and the cultivation of the fungus are the only reliable means of differentiating the conditions. What part the aspergillus may play in retarding the healing of tuberculosis is not known since very little study has been made in institutions to determine the incidence of aspergillosis in established instances of tuberculosis. There is no characteristic clinical picture of the secondary infection.

Lopez³⁴ was unable to find spores in the spinal fluid of his case of peripheral neuritis associated with aspergillosis of the upper respiratory tract, and obtained no growth by culture. With the exception of this case, neurological complications have not accompanied aspergillosis. Hence it appears that aspergillus does not display such an affinity for the nervous system as does the torula.

Any tabulation of the frequency of individual symptoms would be inaccurate since some reports contain only the records of the autopsy findings. However, such an analysis will give some idea of the more common symptoms. Of the fifty-four cases reported, hemoptysis occurred at some time during the course of the disease in thirteen cases (25.8%), and fever was noted in ten (18.5%). The use of the terms dyspnoea, emphysema and wheezing is rather confusing, but some type of respiratory difficulty occurred in 10 cases (18.5%). Pneumothorax was found in three instances (5.5%). Special reference was made to coughing in only eight cases (14.8%) but it is unlikely that such a common symptom of other pulmonary lesions would be uncommon in

this disease. The same is true of bronchitis which was recorded in 6 cases (11%); chills occurred in four cases (7%); diabetes mellitus was coincident in four (7%). Aspergilli were found in two cases of empyema (3.5%). The disease has occurred with about the same frequency in men and women. Some authors claim it to be more frequent in men because they come in more intimate contact with grain. This may be true in the Western hemisphere but it is certainly not so in European countries. Wheaton's case, a child of 30 months, is the youngest recorded instance and Virchow's patient who was 77 years of age is the oldest.

During the stages of dyspnoea the sputum may be tenacious and blood streaked, but it is more often watery, and contains small gray masses 1 to 3 mm. in diameter. In advanced cases the sputum may form layers as in bronchiectasis. Elastic tissue, mycelium and fruiting heads are found usually with ease in fresh sputum. Fragments of mycelium may take an acid-fast stain and may be mistaken for tubercle bacilli.

Most authorities agree that the changes produced in the lungs by pneumomycosis can not be differentiated roentgenographically from pulmonary tuberculosis.

TREATMENT

The administration of iodides in large doses has been the treatment of choice since the publication of Renon's monograph. The intravenous administration of sodium iodide probably has no advantage over the administration orally. Arsenic is often mentioned as a therapeutic adjunct but the literature contains nothing to indicate that its therapeutic efficacy is comparable to that of iodide.

Fresh air, sunshine, supplementary feeding, and other roborant measures to increase the general resistance of the body will hasten convalescence.

SUMMARY

Pulmonary aspergillosis occurs as a primary infection. There are no characteristic symptoms or physical signs. Acute cases present a picture common to any acute respiratory infection, while chronic cases run a course similar to that of chronic pulmonary tuberculosis. In the case reported here, the diagnosis was suggested by the history. The

differential diagnosis must be made by the laboratory.

While the specific antigenic reaction may indicate the presence of aspergillus within the body, it is of no value to differentiate the primary type from the secondary. Examination of the fresh sputum for tubercle bacilli, spores and mycelium, and the culture of sputum on special media furnish the most reliable laboratory data. When practicable, animals should be inoculated. Fragments of mycelium that are acid-fast may be mistaken for tubercle bacilli. Unlike sporotrichosis, aspergillosis does not lead to the development of agglutinins.

The gastro-intestinal tract has a high resistance to aspergillar infection. Although the aspergillus has been said to produce a toxin which has an affinity for nervous tissue, actual infection of the central nervous system has not been reported.

Present day methods of treatment are the same as those used by Renon, thirty years ago. If not dismissed from observation too soon, acute cases, intensively treated, may recover. The statement of Gardey, that recovery usually takes place after sixty days of iodide therapy, is too optimistic.

Much valuable information might be obtained from institutions caring for tuberculous patients, if sputum examinations for fungi were made a routine procedure.

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DISCUSSION ON PAPER OF DRS. WAHL AND ERICKSON

Dr. V. P. Sydenstricker, Augusta: I think this is one of the most interesting cases we have had reported in a number of years before the Association. Most of us disregard aspergillosis. I think the most important thing we can draw from this paper is the necessity of careful examination of the sputum. I think in most instances we have the sputum examined for tuberculosis but fail to ask to have it examined for aspergillosis. The cultural

method, of course, is necessary for the final identification. I have never had the good fortune to see a case of aspergillosis or any of the other pulmonary mycoses, but I have suspected that they are more common than is thought, just as so many cases of pulmonary tuberculosis were overlooked up to a few years ago.

Dr. Hal M. Davison, Atlanta: I have never had the good or bad fortune to see a case of pulmonary aspergillosis. At present, we have one case of blastomycotic infection in a colored male in the Grady Hospital. The patient is a man of about sixty, whose trouble began with cold while he was in Detroit. He returned home with a very high fever, soon began to cough up large amounts of sputum, especially in the morning, and when he was admitted to the hospital, he had a marked secondary anemia, his red blood cells being about one million. When first examined, a diagnosis of tuberculosis was made, but no organisms could be found in his sputum. No yeast forms were found on fresh smear. However, organisms typical of blastomycotic infection were found upon culture, and later a definite diagnosis was made by passing through the sugars. This patient has improved a great deal after two transfusions of blood and the administration of large doses of potassium iodide.

We see a great many patients who have been diagnosed asthma, who say they have been suffering from a slight cough for ten or fifteen years without going to see a doctor. Upon examination, these patients show a chronic pulmonary fibrosis, but we do not find tubercular bacilli in the sputum. It is possible that many of these cases are caused by mycotic infections. We have found nothing suggestive of mycotic infection in smears from the sputum, but we have not cultured it.

Some years ago Dr. Robert Cooke began to test asthmatics with dust extract. Many patients react to house dust, but most of them react more strongly to extracts of their own house dust than to the extract of another house dust. No one has ever isolated the substances in house dust that cause these reactions. Extracts from carpets, beds, pillows and everything else in the house has failed to give a reaction. But if we clean the house with a vacuum cleaner and make an extract from this dust, we often get a very marked reaction in testing. It has been suggested that mycotic spores in the dust may be causing these reactions.

I wish to say that we cannot tell from the part of the paper that Dr. Wahl has read just how much hard work he has done on it, but

I have had the pleasure of reading the entire paper and know that it is indeed excellent. The references given are very valuable. I hope that every one of you will read his paper carefully when it is published in the Journal.

Dr. E. C. Thrash, Atlanta: This is an excellent paper and I am glad to hear it, but we must not lay the flattering unction on our souls that when we find mole growths on the sputum we have a mole growth infection. I would not believe that I had a mole growth infection until I had inoculated a guinea pig and produced the disease in the guinea pig. I would not depend upon the microscopic examination. The pathogenic types are so similar to the nonpathogenic. I would not feel that I had a mole growth infection from finding the mole growth in the sputum any more than I would feel that I had a blastomycotic infection from finding the yeast plant. We do have these mole growth infections but we will probably go through life without seeing one. Looking out for them is fine, but 9,999 out of 10,000 cases will prove to be tuberculosis whether the patients have the germ or not. Even if you do not find the germs, the mole growth does not necessarily mean that that is the source of the infection. It should always be proved to be pathogenic before it is decided that it is causing the disease.

Dr. Theodore Toepel, Atlanta: I consider myself very fortunate in hearing Dr. Wahl's paper. He describes minutely a case I had in Atlanta. In that case there was a condition which began in the left index finger and went up the arm, necessitating amputation, and finally the metastatic action went into the lungs. Large doses of potassium iodide, as large as eight drams in twenty-four hours, controlled it. What else may develop I do not know at present. The patient is suffering now from acute keratitis.

Dr. E. F. Wahl, Thomasville, (closing): The point brought out by Dr. Thrash is a very potent one. We must never lose sight of the fact that the mere finding of a fungus does not prove that it causes whatever disease may be present. In this particular case, the United States Department of Agriculture studied the organism and considered it of the pathogenic type.

Philip Lewin, Chicago (Journal A. M. A., June 16, 1928), describes an improved technic in the application of plaster-of-paris casts in the treatment of congenital clubfoot. In addition to the routine application of casts, one applies a crossbar of plaster with a foundation consisting of two wooden tongue depressors cut to the required length. One tongue depressor is placed over and the other under the completed casts at a point about 1 inch (2.5 cm.) above the internal malleolus.

TULAREMIA*

J. A. REDFEARN, M.D.
Albany

Tularemia is an infectious disease occurring primarily as a fatal bacteremia in wild rodents. From this source it is transmitted to man by the bite of an infected tick or fly, by contamination of hands or conjunctival sac with portions of the internal organs or body fluids of infected rodents, flies or ticks. The cottontail is the source of infection which is of greatest concern in Georgia. Bacterium tularense is a small pleomorphic organism. Gram-negative and nonmobile.

The four types of this disease are: (1) Ulceroglandular, the initial lesion a papule followed by an ulcer of the skin and accompanied by a regional lymphadenitis; (2) Oculoglandular, involving the conjunctiva and regional lymph glands; (3) Glandular involvement without primary lesion; (4) Typhoidal without ulcer or involvement of glands.

SYMPTOMS AND COURSE

The period of incubation varies generally from one to ten days. The onset is sudden, ushered in by headache, chill or chilliness, fever, pain, nausea which is persistent, prostration and sometimes vomiting. The patient complains a great deal of pain, general weakness and nervousness during the course of the disease. Pain is most acute in the infected glands and abdomen. Fever, typhoidal in type, generally lasts from two to three weeks and there may be several chills at irregular intervals. At the time of the first visit the physician is impressed with the severe illness, seemingly out of proportion to the innocent appearing ulcer. There is very little discharge and local inflammation is not marked. Inspection and palpation of the regional glands will reveal them enlarging and tender with reddening of the skin covering the glands. There may be red streaks leading away from the primary lesion. The fever after two or three days shows a remission for two or three days, followed by a rise to original height (103-4),

after which there is a gradual decline to normal. The writer has recognized six cases during the past three months, all primary lesions occurring on the fingers and caused by handling infected rabbits.

DIAGNOSIS

If the disease is borne in mind the practitioner will experience no difficulty in making a correct diagnosis. On the other hand he may treat for septicemia, influenza, appendicitis, tuberculosis, embolus or thrombus, typhoid, impending tetanus, malaria, etc. Confusion should suggest the questions: "Have you dressed or handled while cooking a rabbit? Have you been bitten by a tick or fly?" Search for a papule or ulcer on the skin or mucous membranes and persistent enlargement of the lymph glands draining a lesion. Fever alone may be the only symptom suggesting this disease. Finally prove the diagnosis by agglutination of bacterium tularense from blood serum drawn in the second week of illness, followed by an increase in titre from blood drawn during the third week.

REPORT OF CASE

Case No. 1: Mrs. F. G., white, married, age 32, first seen January 19, 1928, when she was suffering severe pain in 3rd finger, right hand, where there was a small, innocent looking ulcer, $\frac{1}{2} \times \frac{1}{4}$ inch. Pain in right arm and right side with girdle-like abdominal pain. She complained of extreme nervousness, weakness and nausea. P. M. temperature 103, history of three chills at irregular intervals. Her physician had given anti-strep. serum 2 or 3 days previously. Blood picture normal in range. Smears negative to malaria. Had dressed a wild rabbit which had a tick on it on January 6, 1928. There was a small abrasion on her finger at the time produced by chicken wire. The epitrochlear and axillary glands were greatly enlarged, tender on palpation with red and inflamed overlying skin. Blood sent to the Hygienic laboratory reported positive by Dr. Edward Francis to tularemia.

Case No. 2: H. M., colored, married, age 37, came into my office on the morning of March 14th with a persistent cough, reddened, weeping eyes, temperature 103, markedly inflamed gums, foul tongue with fetid odor of breath. She stated that salivation followed a dose of calomel a few days before. Her chief complaint, aside from cough, was pain in left arm, mouth, side and across her abdomen. In examining her chest enlarged left epitrochlear and axillary glands were noted whereupon

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her fingers were examined and a small ulcer was found on the end of her third finger, left hand, just below the nail. Chest examination negative. Patient was then asked whether or not she had dressed a rabbit recently and she at first said she had not but upon further questioning did remember that she handled a rabbit in cooking which her ten-year old son had dressed on February 24th. At this time when questioned about her son she said that he had a painful arm and severe pain in his stomach with fever and had been kept in bed by his physician for a week for appendicitis. She did not think there was an ulcer on his hand. Three days later the boy was seen and an ulcer found between his second and third fingers. Blood positive to tularemia.

Case No. 3: Mr. S. G., white, married, age 28, called me on the afternoon of April 2nd saying that he had a peculiar skin rash which had been puzzling to several physicians. He complained that his neck felt like it had a red hot collar around it. His temperature was 101 in the mornings and 104 in the afternoons. He had a small ulcer from which had been removed three days before a small piece of steel the size of a pin head. The steel had entered the end of the third finger of his right hand about a month previously. The right epitrochlear and axillary glands were enlarged and tender with red, overlying skin. He complained of excruciating pains, general weakness and nausea. The day following removal of the piece of steel his physicians administered anti-tetanic serum. Next day there was an extensive rash down both sides of his neck and shoulders and posterior surfaces of his hands and forearms, mostly macular, but some papules and pustules were present. Despite this rash and surgical interference the inflamed regional glands were so typical until the fact that tularemia was remembered suggested the inquiry whether he had dressed a rabbit or not. At first he was certain he had not but presently remembered that while out riding with his wife and sister who was visiting from Orlando, Florida, he saw a rabbit by the road, stopped his car, got out, threw a wrench but missed it. The rabbit hopped a few feet, sat down and waited until the wrench was recovered when he was killed. After dressing the rabbit S. G. requested his wife to dissect it but she said she did not know how whereupon his sister volunteered to do so. Mrs. S. G. then handled the rabbit while cooking. Both ladies caused tiny abrasion on their fingers with the butcher knife. The result was that all three contracted tularemia as proven by blood reports from Dr. Edward Francis.

In conclusion the writer wishes to emphasize the necessity of remembering tularemia wherever there is any presence of an ulcer

with regional glandular involvement and inquiry as to whether a wild rabbit has been handled within the past few days or weeks. If there are inguinal glands involved instead of epitrochlear and axillary remember this may be due to the bite of a tick or that there may be primary glandular involvement without evidence of initial lesion. Lastly the primary lesion may occur in the conjunctival sac with local glandular involvement, this being always quite serious. Owing to great economic loss, suffering and occasional death, it becomes the duty of physicians in Georgia to warn repeatedly their patients and friends. Warning once is not sufficient for five out of the six cases mentioned here had been warned of the possible infection. Finally the writer wishes to thank Dr. Edward Francis of the Hygienic laboratory for his kind co-operation. His articles and personal correspondence have been used freely.

DISCUSSION ON PAPER OF DR. REDFEARN

Dr. M. E. Winchester, Atlanta: Dr. Redfearn has covered the clinical aspect of tularemia very well indeed, and I have nothing to add to that phase of it. It is important for the medical profession and the public to realize the tremendous economic loss this disease may occasion. Not even typhoid fever causes such a loss to the individual. Some patients have not returned to normal for six months or even a year after an attack of tularemia. Suppuration of the lymph glands has been noted from ten to twenty-two or twenty-four months after the onset of the disease. The fact that one physician has seen seven cases suggests that the disease must be increasing in rabbits, especially in the vicinity of Dougherty County. Prior to 1928 there is a record of only twenty cases; that is, only that number was reported to the State Board of Health and to Dr. Edward Francis of the United States Hygienic Laboratory. Six cases have been reported from other parts of the State since Jan. 1, 1928, while in 1927 only one case was reported during the entire year. No doubt the physicians are becoming more familiar with the symptomatology of tularemia, which would account for some increase in the number of cases diagnosed, but the difference is too marked to be explained entirely in this way. Heretofore, all the cases reported seem to have resulted from direct contact with an infected rabbit, but the biting fly seems to have been a factor of transmission in the southeastern states. It is possible, however, that if the disease is increasing among rabbits the insect carrier factor will develop. Insects to be considered in this connection are ticks, lice, fleas, mosquitoes, and biting flies.

Since the transmission is purely mechanical—that is, the organisms are carried directly on the proboscis of the biting insect from the rodent to the human subject—almost any biting insect is a potential carrier. In addition, special precautions in handling rabbits should be emphasized. The public should be warned against handling any wild rabbit which is found to be tame or sluggish in its get-away. Such conduct would indicate that the animal is abnormal, and possibly infected. So far as I know, no cases have been reported as the result of handling domesticated rabbits, and no other rodents have as yet been incriminated, although it is possible that squirrels and rats could enter into the problem.

We would like to have the profession realize that our laboratory is now equipped for making the agglutination test for this disease. We use a killed suspension of the organism, which is obtained from Dr. Francis. No attempts will be made to culture the organism in our laboratory. Eleven laboratory workers at the U. S. Hygienic Laboratory and elsewhere have contracted the disease from working with the organism. We have accordingly warned other laboratories in the State against any attempt to cultivate the organism.

An interesting feature of this disease from the laboratory standpoint is the production and persistence of the agglutinins. There is a complete absence of the agglutinins during the first week of illness; they are constantly present during the second week, although the blood may show a low titer; the third week shows an abrupt rise in the titer and the maximum is obtained from the fourth to the seventh week. There is a gradual decline thereafter but agglutinins will persist in the blood stream long after recovery. Agglutinins have been demonstrated in cases as long as eighteen years after recovery, according to a recent report in the *Journal of the American Medical Association*. (Vol. 90, No. 12, March 24, 1928.)

In submitting blood for the agglutination test, the use of the Keidel tube is recommended. It is advisable, when possible to submit specimens during the second week of the disease and again during the third or fourth week, the second examination being made for the purpose of determining any increase in the agglutinin titer.

Dr. Redfearn might have mentioned in his paper that one attack of tularemia seems to confer permanent immunity. However, the disease has been known to recur in convalescent patients even after three or four months. I recently read of a case of peritonitis occurring in a patient several months after the initial infection.

Our laboratory would like to have all physicians submit detailed histories with the specimens in all suspected cases. The practice of submitting histories with laboratory specimens should be encouraged for frequently the laboratory is able in this way to find some unsuspected clue which can be followed up with laboratory study of the specimen.

Dr. W. R. Dancy, Savannah: Dr. Redfearn has brought a very interesting subject to our attention, one which I think this Association should give great publicity in order to protect the public. As to the distribution of this disease, as you recall, it was first identified in the northwestern states and California, in ground squirrels first and then in the jack-rabbits and later in common rabbits. For years it was confined to the district west of the Mississippi, but it has spread eastward. Now the only section of the country that is free from tularemia is the northeastern, the new England States.

As to the transmission, as has been stated, most of the cases are the result of handling rabbits. Others have occurred from any biting insect that might possibly bite the rabbit and also the individual. In Texas the horse fly and the deer tick both transmit tularemia.

One of the interesting things that has been called to my attention which is very striking, is the time limit of contact for transmission through the skin, not the broken skin but the perfectly normal skin. I recall a case which was recently demonstrated in New Orleans in which the blood of the rabbit that was infected with tularemia, was rubbed on the back of the hands, which were in perfectly normal condition, washed off in twenty minutes, but which produced a marked edema within a few minutes and an enlargement of the axillary glands, the next day a rise in temperature and eight months later they found the *B. tularensis* in the blood of the patient.

Another interesting thing in relation to tularemia observed in New Orleans is this: You know that many cases of cerebro spinal syphilis have been treated by the introduction of malarial infection. Severe paroxysms, eight or ten, result and it has been reported that these have cured certain cases of general paresis which had not responded to the usual arsphenamin and other anti-syphilitic treatment. In New Orleans at the Tauro clinic a case of general paresis was treated by all known methods, including the malarial method, but the positive Wassermann reaction on the blood and spinal fluid persisted. Some months later it was decided to attempt to obtain a reaction by injecting the blood of the patient with tularemia. They did this and the patient for the first time had a negative blood and spinal

fluid Wassermann reaction, and the other serological tests were also negative. I saw this patient. It was stated that he had been completely out of his mind, but when I saw him some three or four weeks later he was able to answer questions, appeared to be recovering, and had a negative Wassermann reaction in both blood and spinal fluid.

Dr. A. R. Rozar, Macon: I think this paper is very timely, for this disease is evidently on the increase in our section of the State. Within four months I have seen two cases. In all the cases we had the findings which have been described. One case appeared in a housewife who had been cleaning house and scraped a knuckle on the plaster. That evening she cleaned some rabbits and developed tularemia. The other case was that of a man who cleaned some rabbits, and then pricked his hand with a briar and developed tularemia.

There was not much said about treatment, but one point I want to suggest is that when glands suppurate it is better to aspirate them than to open them. The pus is thin and they heal very slowly if they are opened widely. I congratulate Dr. Redfearn on his paper.

Dr. F. B. Blackmar, Columbus: I wish to speak of a case that was thought to be tularemia but Dr. Francis was not able to get a positive report. The circumstantial evidence was interesting. The daughter of a patient found a small baby rabbit in the woods infested with ticks. She took the rabbit in her lap and took the ticks off and turned the rabbit loose. Twenty-four hours later I was called because the mother had developed an acute conjunctivitis and headache. On Tuesday she had a chill, a temperature of 103° F., conjunctivitis was more intense, and a corneal ulcer had developed. The irregularity of temperature went on and she had three or four chills, but never any marked enlargement of the glands, although some of them were just palpable, and after three weeks of temperature, she recovered. Antiseptics were tried on the corneal ulcer. Mercurochrome was used and iodine and finally the actual cautery was used before the ulcer healed. The agglutination was negative after two weeks and after three weeks. The clinical course of the case with fever resembling typhoid (without serological evidence of typhoid) and the history of exposure to a tick infested rabbit has made me believe this was a case of tularemia of the cornea, which did not develop sufficient agglutinins to show an agglutination.

Dr. Sidney E. Bray, Savannah: Two or three weeks ago a lady had an eruption on the

skin which I could not classify, but I noticed an impetiginous eruption around the thumb nail. She gave a history of her little boy having a rabbit which he brought home, and later this child developed a lesion on the hand. The patient gave a history of the usual fever and glandular enlargement, and I made a diagnosis of tularemia. It seems the grandmother of the child had read articles by Dr. Francis in the newspaper and gave a good history. I told them it was tularemia, and the mother said that was what she thought. I told her that she was a very good doctor.

Dr. J. A. Redfearn, Albany, (closing): I thank the gentlemen for their discussions. I have had some very interesting correspondence with Dr. Francis. I asked him how high the titer runs, and he said that in the third week in nearly all cases it is high, and has been known to run as high as 1:2560, nearly all run to 1:640. One of the patients had a fine pen of chickens that he thought a lot of and when he was not working he took care of his chickens. When he dressed his rabbit he threw the internal organs into the pen and the chickens had a great feast, but afterward he found that one of his fine roosters and two of his hens had died. I got them and made an examination but could not find any enlargement of the glands or of other diseases such as chickens usually have. I wrote Dr. Francis and asked about that point, and he has been very thorough in his work for he has fed chickens on highly infected spleens but has been unable to produce tularemia in the chickens.

All of our cows have been tick free and I was anxious to find out whether the rabbit tick and cow tick were similar. Francis says the cow tick does not transmit tularemia.

The leading points are the enlargement of the epitrochlea and axillary (assuming initial lesion on hand) glands, which will be enlarged to the size of a large hickory-nut or walnut, very hard, tender and painful.

As to the rash, one of the patients had a very extensive rash which resembled smallpox. He was stripped and even the soles of his feet were examined by a physician who thought it was smallpox, but it was not that disease. I think in the first 500 cases there were only fifteen cases of skin eruption, so it is not a frequent occurrence. Enlarged glands are the main feature. Many of the individuals considered this a good joke; one man carried a rabbit next door to a patient who had the disease. The patient said he was not afraid of rabbits, but he found a tick on it and threw it over the fence, possibly saving himself months of suffering.

THE IMPORTANCE OF EYE EXAMINATIONS IN THE DIAGNOSIS OF INTRACRANIAL LESIONS*

CHARLES E. DOWMAN, M.D.
Atlanta

Every patient presenting symptoms suggesting a possible lesion of the nervous system is entitled to a systematic neurological examination. Such an examination is not complete unless the visual organs be thoroughly investigated. The oculist should, therefore, be looked upon not only as one who treats diseases of the eye, but also as one who may aid materially in the diagnosis of lesions of the nervous system as well as certain systemic diseases. The routine use of the ophthalmoscope by the general practitioner is fortunately becoming more and more common. An elementary discussion of the importance of eye examinations as an aid to diagnosis, therefore, needs no apology.

ANATOMICAL CONSIDERATION

An appreciation of the anatomical arrangement of the visual fibers is all essential in the localizing diagnosis of lesions causing visual disturbances. The optic fibers begin in the retina and are gathered together in the optic nerves. Shortly after the optic nerves escape inward through the optic foramina they come together to form the optic chiasm. In the optic chiasm there is a decussation of those fibers which come from the nasal halves of the two eyes, but no crossing of the fibers from the temporal or outer halves. After the fibers leave the chiasm they are gathered together in the right and left optic tract. The right tract, therefore, contains the fibers from the right half of each retina, whereas the left tract contains the fibers from the left half of each retina. Each optic tract courses backward around the outer side of the cerebral peduncle to the so-called primary visual centers in which the fibers terminate. These primary visual centers are located in the posterior portion of the optic thalamus, the lateral geniculate body and the anterior quadrigeminal body.

From the primary visual centers a new set of fibers arise which terminate in the cortex on the mesial surface of the occipital lobes. These fibers are spoken of as the optic radiation. (There are also fibers which run from the external geniculate body and the anterior quadrigeminal body to the ocular nuclei and have to do with the contraction of the pupils and the regulation of the various ocular movements.) It is important to keep in mind the fact that the optic radiations pass through the internal capsule behind the ordinary sensory fibers, and sweep around the outer side of the lateral ventricle where they lie within the deeper portion of the temporal lobe, and thence proceed to the occipital lobe. The cortical visual centers on the right side receive visual impressions from the right side of each retina and vice versa. These centers are, therefore, so-called "half-vision" centers.

THE SIGNIFICANCE OF VARIOUS ALTERATIONS IN THE VISUAL FIELDS

As objects seen to one's left are projected by the lens on the right side of each retina the physiological result is that these impressions are conveyed by the right optic tract and radiations to the visual centers in the right occipital lobe, and vice versa. By means of perimetrie studies of the fields of vision one receives enormous aid in the localization of lesions which may affect the visual fibers in various portions of their course from the eye to the visual cortex.

A complete lesion of the optic nerve somewhere between the eye and the optic chiasm will cause complete blindness in the corresponding eye.

Lesions of the optic chiasm will give rise to certain defects in the visual fields according to what part of the chiasm is affected. As the chiasm lies over the pituitary gland a tumor of this structure pressing upward on the central portion of the chiasm will affect those fibers which decussate and which come from the nasal half of each eye. Such a lesion would therefore give a so-called "bitemporal hemianopsia." The same finding would result from the pressure of tumors above the chiasm, or from pressure by a distended third ventricle, etc. Occasionally such lesions as bilateral aneurisms of the internal carotid

*Read before the Medical Association of Georgia, Savannah, Ga., May 9, 1928.

artery within the skull, the bilateral extension of pituitary tumors, etc., may involve through pressure only the outer fibers of the chiasm. The result of such a lesion as far as the visual fields are concerned would be a binasal hemianopsia. Again, a lesion destroying one-half of the chiasm would cause a total blindness in the eye on the side of the lesion with a temporal hemianopsia in the opposite eye.

A unilateral lesion involving the optic tract, the primary visual centers, the optic radiations or the half-vision cortical center would cause a blindness in the opposite half of the visual field of each eye. Such a visual field disturbance is spoken of as a "left homonymous hemianopsia" in right sided lesions, and vice versa. A patient presenting such a lesion would be unable to see objects on the contralateral side when looking straight ahead.

The exact localization of lesions giving rise to a homonymous hemianopsia depends upon other neurological manifestations and can not be discussed at this time. The presence of such a visual defect, however, is an enormous step towards making a correct localizing diagnosis, especially when one keeps in mind the anatomical course of the affected fibers and brings out or eliminates the various findings which should be present when particular areas through which the fibers run are affected.

VISUAL HALLUCINATIONS

Reports in the literature have shown that various types of visual hallucinations can be caused by lesions located anywhere along the visual tracts from the retina to the occipital lobes. There are two types of visual hallucinations which may be of great localizing value. The first is the perception of flashes of light in one-half of the visual fields, namely, in the field of vision contralateral to the lesion. When such hallucinations are accompanied by a contralateral homonymous hemianopsia they are very suggestive of occipital lobe involvement. The second type consists of visual hallucinations of complex objects, such as faces, flowers, automobiles, etc. Such attacks may likewise occur in the contralateral fields of vision and are not infrequently accompanied by hallucinations of smell (uncinate). When present they indicate a temporal lobe involvement.

In a recent review of one hundred verified

intracranial tumors the history of definite visual hallucinations was obtained in only two cases, one occipital and one temporal lobe tumor. There were only two cases of occipital lobe tumor in the series and visual hallucinations were complained of in only one of these. They consisted of flashes of light in the contralateral visual fields. The case in which the temporal lobe was involved had hallucinations of a complex nature. The patient would see an automobile rise up and hover over the tree-tops. These visions were always to the patient's left. A large right temporal meningioma was removed at operation. That such hallucinations are comparatively infrequent is evidenced by the fact that they were noted in only one of the eleven temporal lobe tumors noted in the series mentioned.

THE MECHANISM AND SIGNIFICANCE OF CHOKED DISC

The presence of a true swelling of the optic disc is a finding of paramount importance in the diagnosis of increased intracranial pressure. Such a condition is spoken of as "choked disc." The mechanism of choked disc has long been a matter of dispute. It so happens that the space between the vaginal sheath (which surrounds the optic nerves) and the optic nerves communicate freely with the subarachnoid space surrounding the brain. When, therefore, there is an increase in intracranial pressure, the fluid in the interpeduncular cistern (a part of the subarachnoid system) is forced down the space around the optic nerves into the optic nerve heads themselves. This causes a filling of the normal cupping of the disc and an actual swelling which can be detected by the ophthalmoscope. As the edema of the disc increases the veins are pressed upon to such an extent as to cause an actual venous stasis. As a result the retinal veins become engorged and tortuous, and retinal hemorrhages frequently occur. As the result of venous stasis albuminous exudates occur with an eventual organization. The organized albuminous material compresses the fibers of the optic nerve to such an extent as to eventually lead to an actual atrophy (secondary optic atrophy). The degree of visual disturbance depends largely upon the degree of optic atrophy. One of the points of clinical differentiation between choked disc and neuroret-

initis is the early and rapid failure of eyesight in the latter condition. One not infrequently sees an early though high degree of choking with practically no conscious disturbance of vision on the part of the patient. When, therefore, the vision begins to fail in cases of increased intracranial pressure a consecutive optic atrophy has taken place. Should this condition be allowed to go to complete blindness before the pressure be relieved the chances of return of vision are very slim, even though the increased intracranial pressure be corrected. This should be borne in mind in cases of brain tumor. In one hundred verified brain tumors twelve had gone to complete blindness in one or both eyes before coming to operation and in no case was there a return of vision once the sight has been completely lost.

It is not infrequently observed in cases of increased intracranial pressure that there is more choking on one side than on the other. It has been believed that the greater choking is on the side of the tumor. This is not necessarily the case. Parker of the University of Michigan has shown that when the choking is greater on one side it is because the intra-ocular tension is less than in the opposite eye. He proved this to be the case both experimentally and clinically.

PRIMARY AND SECONDARY OPTIC ATROPHY

The presence of an optic atrophy can be readily detected with the ophthalmoscope. It is of great importance to differentiate between a primary optic atrophy and a secondary or consecutive atrophy. A primary optic atrophy may result from pressure on the optic nerves, as for example, a tumor in the region of the chiasm, an injury to the nerves, or a toxin which has acted directly on the nerves. The appearance of the disc is quite characteristic. The disc may be very white or grayish, the outlines are clear cut, the lamina eribrosa is well marked, and the cupping is present. A consecutive optic atrophy on the other hand is the end result of a choked disc or of an inflammation of the disc. Such an optic atrophy is characterized by a grayish or grayish-white appearance of the nerve head, the margins of the disc are somewhat obscured, the lamina eribosa can not be seen, the cupping is not present and there has been more or less fibrous

tissue proliferation in the disc. Such a picture is strongly suggestive of a long standing increase of intracranial pressure, even though there is no evidence of an actual swelling of the nerve head.

RETROBULBAR NEURITIS

A patient may complain of disturbance of vision; on ophthalmoscopic examination the fundus may appear normal in all respects, and refractive errors may be ruled out or corrected. Under such circumstances a so-called "retrobulbar neuritis" is to be suspected. If such a condition is present the perimetric examination will usually reveal a central scotoma. The significance of a retrobulbar neuritis can not be too strongly emphasized. It may be due to an intraeranian tumor pressing on the optic nerves, a multiple sclerosis, or some form of toxemia either chemical or bacterial. The amblyopias of alcohol and tobacco are due to retrobulbar neuritis. The recognition of the condition may lead to the diagnosis of multiple sclerosis or chiasmal tumor long before the appearance of other symptoms, and is therefore a finding of great diagnostic value.

EYE FINDINGS IN ONE HUNDRED CONSECUTIVE VERIFIED INTRACRANIAL TUMORS

Dr. Wm. A. Smith and I have recently made a critical study of one hundred consecutive intraeranian tumors which were verified by microscopic study. Of these cases fifty-three complained of poor vision when first seen. Of these, twelve were completely blind in one or both eyes. The visual acuity was not always the same in both eyes, one eye even becoming blind in some cases before there was much disturbance in the other eye. In the twelve cases in which there was blindness the time which elapsed between the onset of poor vision and complete blindness varied from three weeks to twenty-seven months.

The ocular fundi were normal in fourteen of the one hundred cases. In the remaining eighty-six cases there were positive findings as follows:

| | |
|--------------------------------------|----|
| 1. Congested veins only | 4 |
| 2. Slight choking | 11 |
| 3. Marked choking | 55 |
| 4. Atrophy without choking | 14 |
| 5. Arteriosclerosis only | 2 |

6. Retinal hemorrhages associated
with choked discs 28

Visual field studies were made in eighty-two of the one hundred cases. In six there were total blindness and in the remaining twelve the patients were either unconscious or unable to co-operate in the examination. In sixteen cases the visual fields were of localizing value as follows:

1. Homonymous hemianopsia 6
2. Bitemporal hemianopsia 4
3. Nasal hemianopsia on one side, 2
4. Temporal "cut off" on one side, 4

Diplopia is not infrequently complained of in cases of chronic increase of intracranial pressure. Of all the cranial nerves the sixth has the longest course within the cranial cavity. General increase of pressure easily affects one or both of them with a resulting imbalance of the external ocular muscles. It was noted in thirty-four of the one hundred cases.

In conclusion I wish to emphasize the following:

1. A fundamental knowledge of the anatomical arrangement of the visual fibers is essential for the proper interpretation of certain defects in the visual fields.
2. Choked disc indicates the presence of increased intracranial pressure.
3. A failing vision in the presence of choked disc suggests the occurrence of consecutive optic atrophy.
4. Blindness due to consecutive optic atrophy is usually permanent, and should therefore not be permitted to occur by the unnecessary delay of operation for the relief of increased intracranial pressure.

DISCUSSION ON PAPER OF DR. DOWMAN

Dr. B. H. Minchew, Waycross: Dr. Dorman brings to our attention some very important points in regard to diagnosis of intracranial lesions, with particular reference to the assistance the ophthalmologists can render in making the diagnosis, as well as in locating the diseased area. He has dealt particularly with the examination of the eye grounds, the significance of papilledema, choked disc, optic atrophy, and the different forms of hemianopsia. It occurs to me that it might be of interest to discuss briefly some of the symptoms

which can be noted without a knowledge of the details of the examination of the eye grounds. It should be of interest to know that paralysis of any one or a group of the ocular muscles may be the first sign of an intracranial disease, and the ocular manifestation of such condition would be the inability of the paralyzed muscle to function, thereby causing a diplopia, or double vision.

Evidence of syphilis is found in more than half of the cases of ocular muscle palsy. Dr. de Schweinitz states that the resulting paralysis may be due to an inflammation or gummatous change affecting the nerves at the base of the brain, or it may be central in origin from disease of the nuclei of the nerves or of the brain in their immediate vicinity. This form of paralysis has been noted as early as the sixth month after the primary infection. It is apparent, therefore, that one should be on his guard in treating any form of acquired syphilis, and should recognize double vision as a possible manifestation of an intracranial lesion. We must recognize also that tuberculous meningitis, aneurysm, disease of the cavernous sinus, and brain abscess may be associated with paralysis of the rotary muscles of the eye.

If one finds a pupil which does not react to light, accommodation or convergence, and is convinced that medicinal midriasis has not caused the dilatation, he is justified in suspecting a disease at the base of the brain which affects the third nerve. The same can be said if one finds the so-called Argyll Robertson pupil, except that the proximal end of the optic nerve may also be involved.

If ophthalmologists are to be depended upon to assist in the diagnosis and location of brain lesions by demonstrating the presence of papillitis, we must be able to differentiate between that type of neuritis which involves the swelling of the disc and the adjacent structures, from the neuroretinitis which occurs in kidney diseases and the papilledema which is caused by some toxic element in the form of focal infection.

We should bear in mind that vision is practically normal in the early stages of choked disc; hence, one may be misled in the diagnosis of a brain lesion because of the lack of interference with vision. Some investigators would make a diagnosis of choked disc only when there is considerable rise in the lumbar pressure; others require at least two diopters of swelling before making such a diagnosis. It is well, therefore, for the ophthalmologist to insist upon having all clinical and laboratory data in their possession before attempting a definite diagnosis of brain lesions based upon the eye ground manifestations.

Dr. J. Calvin Weaver, Atlanta: Doctor Dowman has gone so thoroughly into the subject that I only wish to discuss it briefly from a general standpoint, in the hope of driving home the points he has brought out. His paper brings to mind two statements, one by Mr. Woodrow Wilson, and one by Dr. Harvey Cushing, which seem very apropos. Mr. Wilson has said, "Some people see only with the eyes retina, and not with that deep vision whose images lie where thought and reason sit." Doctor Cushing said, "This is the age of specialization, but specialization can be overdone, and there is no inherent reason why the quality of investigator, teacher, and practitioner should not go hand in hand, be represented in a single individual, and be none the worse for the mixture."

Though I do not do so in a spirit of criticism, I wish to bring out the idea that some of the ophthalmologists are still not seeing further back than the eyes retina. In other words, they are not seeing lesions in the eyes from the neurological standpoint, which they will have to come to sooner or later.

Regarding Doctor Cushing's statement, and not to disparage specialization, there is no reason why the general practitioner who is well versed in the use of the stethoscope, and many who use the cystoscope, should not also be well versed in the use of the ophthalmoscope, and begin to recognize the danger signs of these intracranial lesions that ultimately lead to blindness and to death.

The Honorable Mayor in his talk mentioned the new responsibilities that are coming into the medical life, and I feel that the eye ground study is one of the most important of the new responsibilities that all of the ophthalmologists, and the internists are going to have to meet.

As to choked disc, I think there is no question but that it is difficult just from the eye ground findings to differentiate between an inflammatory condition and a profound choked disc; on account of which we must not be unmindful of the interrelation of general diseases. We must study this condition as a systemic disease, and not purely from the local findings. If we do this, the conditions resulting from the intracranial lesions will almost classify themselves; not only from the appearance of the nerve head but also from the early visual failure.

There are one or two conditions to which I would call to your attention: one is, the progressive edema of the brain following head injuries in which the patient fails to respond to the hypertonic treatment. The ability to study the eye findings and note the gradual swelling of the retinal veins will give an accurate understanding as to the time a decompression is

indicated. Another condition is, epilepsy following an old head injury which has not been treated properly, thereby allowing a cyst of the brain to form. If these cysts happen to be along the visual tracts, the patient will show a half blindness of which he is unaware. For their own safety and the safety of others it is important that these patients should be aware of this visual defect.

To illustrate the importance of the eye studies, it seems pretty well established, particularly at the Mayo Clinic, that at least six out of ten brain tumors are diagnosed and located by the ophthalmologists from the eye findings, before they reach the neurological department.

Dr. L. McF. Gaines, Atlanta: I wish to mention briefly two points that may be enlarged upon, particularly for those who are not eye specialists. The patient may have a very decided degree of choked disc with no subjective symptoms whatever, so the question which is put to the patient, "Have you noticed any disturbance of vision?" will be answered in the negative. This does not rule out the possibility of very marked degrees of choked disc, however.

The second point is, particularly for those of us who were trained in medicine several years ago, that we are accustomed to think of three symptoms of brain tumor—headache, projectile vomiting and choked disc. We realize today that none of these symptoms are necessarily symptoms of brain tumor, but are simply evidences of increased intracranial pressure. The early symptoms of brain tumor should be spotted long before that time.

Time does not permit me to go into the various possibilities, or into anything in the way of symptomatology and objective examination in detail, but this will draw attention to the importance of very thorough eye examinations, particularly ophthalmoscopic studies and the perimetric studies, which may lead to much earlier diagnosis and to better prognosis at operation.

Dr. Charles E. Dowman, Atlanta, (closing): The question of diplopia, or double vision, is interesting as this condition frequently occurs in increased intracranial pressure. In the 100 cases mentioned, it was present in thirty-four. In only one was it of localizing significance, namely, in a tumor of the pons where the sixth nucleus was involved. Diplopia itself is often a symptom of increased intracranial pressure. It is due to the fact that the sixth cranial nerves have the longest course within the cranial cavity and are easily affected, particularly by increased pressure in the third ventricle. This will give an imbalance of the eyes and double vision.

PROCEEDINGS OF THE HOUSE OF DELEGATES OF THE MEDICAL ASSOCIATION OF GEORGIA

(Continued from the July issue of the Journal)

CONSTITUTION AND BY-LAWS

Dr. Frank K. Boland, Chairman: Your Committee, consisting of Dr. M. A. Clark, Dr. Bunce and myself, has been inconvenienced because Dr. Clark has been ill and unable to meet with us. Dr. Bunce and I have had two or three meetings, have gone over the matter thoroughly, and have decided to carry out the wish of the American Medical Association to make some of our nomenclature conform to the model of the American Medical Association, and also we have incorporated in different sections of the Constitution and By-Laws numerous amendments which have been passed since 1921, when the last Constitution and By-Laws were published. There are only two material changes from the old one. I take it that none of you wish to hear me read all of the Constitution and By-Laws, and if it is your pleasure, I will call attention only to the changes which have been made.

Article II and Article III are left the same, except for the insertion of the words "and District Societies" which have been inserted following the words "Medical Societies" in Article III. Article IV is left the same.

Article V has been changed slightly, to read: "The House of Delegates shall be the legislative body of the Association, and shall consist of: (1) Delegates elected by the component county societies; (2) the officers of the Association enumerated in Section 1 of Article IX of the Constitution; (3) ex-presidents and delegates to the American Medical Association."

"Article VI—Council. The Council shall be the Board of Trustees and finance committee of the Association. The Council shall have full authority and power of the House of Delegates between annual sessions, unless the House of Delegates be called into session as provided in the Constitution and By-Laws. It shall consist of the Councilors, the President, the President-Elect, and the Secretary-Treasurer of the Association. Five of its members shall constitute a quorum."

"Article VII—Sessions and Meetings. Section 1. The annual meetings shall take place on the second Wednesday in May, and at such place as shall be designated by the Association, provided that in case of conflict with the meeting of the American Medical Association the Council may change the date by publishing a notice in the Journal of the

Medical Association of Georgia three months before the meeting.

"Section 2. Special meetings of either the Association or the House of Delegates may be called by a two-thirds vote of the Council, or upon the petition of twenty delegates."

"Article VIII—Sections and District Societies. The House of Delegates may provide for a division of the scientific work of the Association into appropriate sections, and for the organization of such Councilor District Societies as will promote the best interests of the profession, such societies to be composed exclusively of members of component county societies."

"Article IX—Officers. Section 1. The officers of this Association shall be a president, a president-elect, two vice-presidents, a secretary-treasurer, a parliamentarian, and 12 councilors, one from each congressional district of the state.

"Section 2. The officers, except the secretary-treasurer, parliamentarian and councilors shall be elected annually, provided that after the annual meeting of 1928 a president-elect and not a president shall be elected annually, the president-elect to assume his office as president immediately after the next annual meeting following his election. The terms of the councilors shall be for three years, as may be arranged, viz.: The first, second, third and fourth for three years; those for the fifth, sixth, seventh and eighth for two years; those for the ninth, tenth and eleventh for one year (1905), and the twelfth to be elected with the ninth, tenth and eleventh for the full term of three years. The secretary-treasurer shall be elected for a term of five years, and the parliamentarian for a term of three years. All these officers shall serve until their successors are elected and installed."

"Section 3. The officers of this Association shall be elected by ballot, and without nomination, at twelve o'clock noon, on the third day of the annual session. The councilors shall be elected at the same time, but on nomination by their respective District Societies at the annual meeting of such Societies preceding the meeting of the Association at which the vacancy occurs."

Article X, Article XI, Article XII, and Article XIII have been left the same.

In the By-Laws, Chapter 1, Section 4, has been slightly changed in regard to honorary membership and now reads: "Sec. 4. Any member for old age, length of service, or other good reasons, may upon recommendation of the Board of Censors, be elected to honorary membership of his county society without dues. Such member shall be enrolled as honorary member of his county society

and this Association, and shall be entitled to all the privileges of the Association.

All of the other changes have been simply the insertion of the amendments already adopted, in the places where they belong.

Chapter VIII—Rules and Ethics, now reads:

"Section 1. The deliberations of this Association shall be governed by parliamentary usage as contained in Roberts' Rules of Order, when not in conflict with this constitution and by-laws.

"Section 2. All papers read before the Association shall become its property. Each paper shall be deposited with the Secretary when read, and if this is not done it shall not be published.

"Section 3. The principles of medical ethics of the American Medical Association shall be those of this Association.

"Section 4. Any member of this Association on locating in a new place for practicing his profession may place his professional card, containing name, address, telephone number, and statement as to whether or not his practice will be limited to any particular class of diseases in the local paper for a period of not longer than one month. The placing of such card for this period of time shall not be considered unethical. The use of the word "specialist" by any member in connection with his name in any newspaper, telephone directory, or other public places, shall be considered unethical."

"Chapter IX—Amendments. These by-laws may be amended at any annual session by a majority vote of the Association after the amendment has laid on the table for one day."

Dr. E. C. Thrash: I wish to call attention to the fact that this is a revision of the constitution and by-laws which has already laid over for a year, and we can act upon it at this time.

Dr. Holliday moved that the report be adopted as a whole. Motion seconded.

Dr. C. W. Roberts: If I am in order I would like to amend the report made by Dr. Boland by offering the following resolutions:

Whereas, The custom which has been followed in the Medical Association of Georgia permitted delegates to the House of Delegates of the American Medical Association to enter immediately on their duties, resulting frequently in the necessity of our delegates going to annual sessions of that organization without sufficient time to familiarize themselves with proposed legislation in the House of Delegates of the national Association, and

Whereas, it has become apparent that our delegates can best serve the membership of our Association by a change in the rule which

has heretofore been followed so as to permit a sufficient period of time for certification to the Secretary of the American Medical Association, and

Whereas, the Speaker of the House of Delegates has requested that delegates be certified at last thirty days prior to the convening of the House and earlier when practicable, and

Whereas, much confusion has arisen in the past growing out of the plan which we have heretofore followed affecting materially the influence which our delegates have been able to exercise in the national House, therefore, be it

Resolved, that the delegates elected at this and succeeding meetings of the Medical Association of Georgia take office January 1st, following their election, and that their term of service run for two years thereafter. And be it further

Resolved, that our delegates be authorized to attend the regular and any called meeting of the House of Delegates of the American Medical Association during the term to which they are elected.

Seconded by Dr. James N. Brawner, and carried.

Dr. R. L. Miller moved the adoption of the report as amended. Seconded by Dr. Fort and unanimously carried.

Dr. Boland: I move you, sir, that the House of Delegates request the Council to have this Constitution and By-Laws as amended printed in proper form and circulated among the members of our Association.

Motion seconded and unanimously carried.

The Secretary: I move that we request the members present from the respective districts for which councilors are to be elected to get together and offer nominations for councilors at the meeting on Friday morning.

Motion seconded and unanimously carried.

The Secretary: In order to clear another point, I move that we amend the order of business by adding to those to be elected the words "President-elect" immediately after the word "President."

Motion seconded and unanimously carried.

The President: The next order of business is the report of the Publication Committee.

Dr. E. C. Thrash, Chairman, presented the following report, and moved its adoption:

REPORT OF PUBLICATION COMMITTEE SIZE OF JOURNAL

Eight issues of the Journal from May to December, 1927, inclusive contained sixty-eight pages each. The issue for January, 1928, contained seventy-eight pages, the remaining three issues for February, March and April, 1928, contained seventy-six pages each.

PAPERS PUBLISHED

Sixty-six state, district and county papers have been published during the fiscal year ending April 30, 1928, as follows:

Thirty-five state papers including all discussions and such illustrations as submitted by authors. Thesis by Dr. E. A. Hines, Seneca, South Carolina, invited guest. Thirty-one papers from the district and county societies. Address by President, V. O. Harvard.

EDITORIALS

Editorials have been contributed by the editor, officers of Association, chairmen of committees, and other members of the Association.

ANNUAL SESSION

Full proceedings of the General meetings of the Seventy-Eighth annual session of the Association, proceedings of the House of Delegates, reports of officers, reports of committees, reports of councilors, and conferences of the secretaries of district and county societies have been published.

AMERICAN MEDICAL ASSOCIATION

Abstracts of the proceedings of the annual session of the American Medical Association held at Washington in May, 1927, proceedings of the House of Delegates, reports of officers and committees.

REGISTRATION

List of all members, visitors and exhibitors registering at the Seventy-Eighth annual session of the Association.

WOMAN'S AUXILIARY

A regular department has been maintained by the Woman's Auxiliary to the Association, publishing the program, reports of the Auxiliary, district and county organizations, news items and other information as submitted by the officers.

NURSES

The Georgia State Nurses' Association has maintained for the past fiscal year a regular department, publishing general information editorially in reference to education, district and alumnae associations, schools, health conferences, State Board examinations, summer sessions, nurses registering in Georgia, legislation, district reports and hospitals. The Nurses' Association pays for this department.

COMMUNICATIONS

Communications have been published during the year on various subjects of interest to the profession.

GEORGIA TUBERCULOSIS ASSOCIATION

The Georgia Tuberculosis Association began with the March, 1928, issue of the Journal to maintain a regular department for an early diagnosis campaign. The Tuberculosis Association pays for this department.

DISTRICT AND COUNTY SOCIETIES

A department has been maintained with a

roster of officers of all district societies, honor roll including all county societies having a 100% membership, lists of new members, reports of district meetings, and announcements of county societies including roster of officers and delegates.

NEWS ITEMS

Available news items in reference to physicians, hospitals, health work, announcements of examinations by the United States Civil Service Commission together with such other information as may have been of general interest.

COUNTY SOCIETIES

A list of all constituent county societies including the names and addresses of the presidents and secretaries.

STATE BOARD OF HEALTH

Morbidity and mortality reports from the Bureau of Vital Statistics, summary of county health work, abstracts from the annual report of T. F. Abercrombie, Commissioner of Health and such other information of general interest.

ABSTRACTS AND BOOK REVIEWS

A department was opened in the April issue of the Journal to be maintained for abstracts and book reviews. Mark S. Dougherty will be department editor. Thirty-five acknowledgments of books received and eleven book reviews have been published.

ADVERTISERS

The Journal has carried three hundred and seventy-nine pages of advertising together with a directory of advertisers and published fifteen short reading notices furnished by our advertisers.

PROGRAM

Program of the Seventy-Ninth annual session has been published.

REPORTS

Reports of the annual meeting of the Surgical Association of the Atlanta and West Point Railroad, et al.; Railway Surgeons; and the Society of Neurological Surgeons have been published.

HOSPITALS

List of all registered hospitals in Georgia with addresses.

DEATHS

Notices of the death of fifty-six physicians have been published together with dates of birth and death, medical school and date of graduation, affiliation with fraternal, medical and religious organizations, when obtainable; and such other information as we were able to secure in reference to their lives.

DIRECTORY

Directory of all members of the Association to December 15, 1927, with their addresses, including roster of officers of each constituent county society.

INDEX

Subject Index and Author's Index of all papers published during the calendar year ending December 31, 1927.

FINANCIAL STATEMENT

Financial statement showing the income and disbursements of the Association in detail.

INCOME

CLASSIFIED

| | |
|-------------------------------------|-------------|
| Membership | \$8,136.75 |
| Advertising | 6,071.09 |
| Exhibits at Athens | 350.00 |
| Subscriptions | 19.00 |
| Collected on cuts for illustrations | 90.71 |
| | \$14,667.55 |

DISBURSEMENTS

CLASSIFIED

| | |
|--|-------------|
| Journal | \$8,499.76 |
| Medical Defense | 2,012.35 |
| Committee on Public Policy and Legislation | 797.83 |
| Council | 521.25 |
| Salaries | 1,950.00 |
| Honorarium for Drs. Harvard and Mulherin | 225.00 |
| Official Stenographer, Reporting Seventy-Eighth annual session | 416.55 |
| Delegates to the A. M. A. | 300.00 |
| Postage | 330.00 |
| Rent | 129.00 |
| Cuts for illustrations | 132.18 |
| (Due us on cuts, \$41.37) | |
| Miscellaneous: Badges, "Badge of Service," flowers, stationery for President, Councilors and Association, Committee on History, pencils, ink, typewriter ribbons, paste, mailing tubes, blue prints and other expenses incurred for exhibitors | 369.78 |
| | \$15,683.70 |

The editorial and business management of our Journal has been unsurpassed by any other State Association Journal in the United States when we take into consideration the facilities and material which they have had at their command. On the part of the Medical Association of Georgia we take this opportunity of thanking the entire management for their earnest and faithful service.

Respectfully,

E. C. THRASH, Chairman,
A. S. M. COLEMAN,
M. M. HEAD,
Publication Committee.

Motion to adopt seconded and unanimously carried.

REPORT OF DELEGATES TO AMERICAN MEDICAL ASSOCIATION

Dr. C. W. Roberts presented the following report:

Your delegates at the outset wish to record their feeling of deep gratitude to the members of the Medical Association of Georgia for the honor conferred in electing them representatives of our own splendid society to the National Association. Appreciating, as they do, the importance of the position and the serious import implied in election to this elevated position, your delegates were present at the opening session of the House in Washington and were constantly in attendance throughout all the sessions of the House which convened during the Washington meeting. We again record with pride the fact that our efficient secretary, Dr. Allen H. Bunce, was again unanimously elected Vice-Speaker of the House, reflecting much credit on Southern medicine. Dr. Bunce is filling this position with credit to himself and to the great and growing medical profession of the Southern States. It is with pardonable pride that we further record the fact that your delegates being constantly in attendance and ever alert, were able, in Washington, to evoke some favorable comment raising our Association, we believe, in the general estimation of the members of the National House. Credit for this position of preferment is largely due to the work of the Vice-Speaker, Dr. Allen H. Bunce, and to the parliamentary acumen of Dr. E. C. Thrash who, on two or three occasions, discovered oversights on the part of the speaker, Dr. F. C. Warnshuis, resulting in temporary postponement of certain important resolutions introduced in the House and seriously affecting, we believe, the traditional right of the county unit in its position to govern conclusively and finally the qualifications of men in its jurisdiction for membership in the American Medical Association.

It is obviously impossible in a short report to do other than touch on certain high points contained in the proceedings of the Washington Session. Your delegates, however, cognizant of the great importance of all questions discussed in the meetings of the House, have undertaken to sufficiently familiarize themselves with its proceedings so as to enable them to answer any questions upon which the membership of our Society may at any time desire more detailed information. We, therefore, solicit inquiries in order to amplify this abbreviated report.

An outstanding suggestion by the Speaker of the House which received unanimous ap-

proval bore on the necessity of election of delegates by constituent State Societies early enough preceding the annual meeting of the National Association to permit certification of delegates at least thirty days prior to its convocation. This is necessary in order to permit the speaker of the House to make Committee appointments. Attention should be directed to the fact that the work of the House is largely done by various Committees there being some ten of these, such as Sections and Section Work; Rules and Order of Business; Medical Education; Legislation and Public Relations, Hygiene and Public Health, Amendments to the Constitution and By-Laws, Reports of Officers, Reports of Board of Trustees and Secretary, Credentials, Miscellaneous Business.

It is to be deplored that in the past our delegates due to a faulty rule governing their election have not frequently had positions on any of these Committees obviously detracting from the dignity of our constituent Society as well as preventing their active participation in the legislative work of these committees. It is to be hoped that a change designating definitely the term of their office may be made as early as is consistent with the Constitution and By-Laws of our Society.

President Jabez N. Jackson in his address to the members of the House sounded again the necessity of close adherence to the principles of medical ethics governing that relation which must exist between members of our great profession. The following brief quotation gives the essence of his address which met high favor in the House and seems to us so important that it is included in this report in the hope that we in Georgia may reiterate those guiding principles more than ever necessary to the development of sound medical opinion in Georgia as well as to the augmentation of their social standing and influence in the body politic. "Again, truth has always its enemies." The idealism of medicine oftentimes seems difficult for even our well wishers to understand. Our efforts for the welfare of people even at the expense of our own selfish interests are frequently misunderstood. Our purposes are even misrepresented by our enemies. The point of attack is usually our ethics, interpreted by such as a secret code for self-protection and selfish advancement. Our opposition to ignorance and charlatanism is attributed to mercenary envy. We do not advertise as does the business man, and he cannot understand why.

"We have published a pamphlet on the 'Principles of Medical Ethics,' and yet even this rudimentary presentation has probably not been read by many doctors and by prac-

tically none of the laity. Yet on it rests the eternal fitness of our profession. It is my firm conviction, therefore, that a comprehensive exposition of ethics should be undertaken, first in a thorough course of instruction to our oncoming young men in medicine right at the onset of their career and the essentials of character inspired equally with the infusion of scientific knowledge. Thus inspired, we should have a new generation of worthier men to honor a worthy profession. Furthermore, when doctors themselves more fully understand our principles they will be better prepared to represent our profession intelligently and to defend its ideals.

"Finally, I believe that a more comprehensive and explanatory manual should be composed which will translate into the language of the laity a real understanding, and that by word and in print its arguments should be carried to the people. Its composition should probably be referred to the Judicial Council."

The report of the Bureau of Legal Medicine and Legislation contained a resolution intended to correct criticism of our profession which has obtained in recent years, bearing on expert testimony. The basis of legislation in this particular rests on lack of fitness on the part of many doctors qualifying as experts to reflect the best opinion for organized medicine. This is notably true of experts testifying in mental cases. The following extract from their report indicates the trend in legislation bearing on this particular question: "A resolution stating the principles that in judgment of the House of Delegates should govern the introduction and presentation of expert testimony was adopted by the House of Delegates in 1926. Pursuant to that resolution, a copy of it was sent to the American Bar Association. Subsequently Dr. Geo. E. Follansbee of Cleveland, and Dr. Woodward, conferred with the Committee on Jurisprudence and Law Reform of the American Bar Association relative to the matter. As a result, an effort is now being made to formulate a bill representing the views of the American Medical Association and the American Bar Association authorizing the appointment of experts by the courts and regulating the introduction of their testimony."

We are advised that, "In accordance with the wishes of the House of Delegates, as expressed at the Dallas Session, the Board of Trustees has assigned a member of the staff of the Bureau of Legal Medicine and Legislation to full-time duty at Washington during the sessions of Congress."

This action of the National House eloquently approves any effort which we may see fit

to put forth in Georgia bearing on the active prosecution of the duties of the Committee on Public Policy and Legislation of this Society. Suffice it to say that the successful accomplishment of Medical Legislation in our day is dependent upon the adoption of methods common to those employed by corporations and others interested in a change of obsolete and ineffective laws pertaining to their respective interests.

The report of the Judicial Council, among many constructive suggestions, dealt with the question of contract practice. Contract practice was defined as follows:

"By the term of 'contract practice,' as applied to medicine, is meant the carrying out of an agreement between a physician or group of physicians as principals or agents and a corporation, organized or individual, to furnish partial or full medical service to a group or class of individuals for a definite sum or for a fixed rate per capita. 'When the compensation received is inadequate based on the usual fees paid for the same kind of service and class of people in the same community.' 'When the compensation is so low as to make it impossible for competent service to be rendered.' 'When there is underbidding by physicians in order to secure contract.' 'When a reasonable degree of free choice of physicians is denied those cared for in a community where other competent physicians are readily available.' 'When there is solicitation of patients directly or indirectly.'"

It behooves us in this state to be ever on the alert unless with the growth of industrialism in Georgia we find the members of our Society torn asunder by the dangers which lurk in the wake of industrial practice. Contract practice to be unfair or unethical is covered in the above definitions.

A resolution introduced by Dr. Albert F. Bulson, Jr. of Indiana, follows:

"Whereas, there is a growing tendency on the part of some insurance and indemnity companies as well as industrial concerns, to impose on physicians by requesting or expecting that more or less complete physical examinations, including written reports of same, or that a written expert medical opinion concerning patients, shall be made for a nominal fee or perhaps no fee at all, and that there is increasing tendency on the part of such organizations or concerns to shift responsibility by making erroneous claims that the services are in the interest of the patient or client from whom the physician cannot justly claim compensation; therefore, be it

"Resolved, that it is the sense of the American Medical Association as represented by this House, that the members of the American Medical Association are under no moral or

legal obligations to furnish professional services or expert professional opinion concerning any patient, or reports concerning professional services rendered any patient, to insurance or indemnity companies, to industrial concerns or their agents, or for the benefit of any third party, unless paid the customary fees charged by the medical men of that community for similar services rendered to private patients." This resolution was referred to the Committee on Miscellaneous Business and was unanimously passed at the second meeting of the House, May 17, 1927. Your delegates consider this an important contribution, tending as it does to clear up an embarrassing question with which our profession has been afflicted for many years.

Your delegates regret that lack of time precludes the possibility of going further into the great volume of constructive legislation passed by the Washington Session of the House. In conclusion your delegates, having by your kindly consideration been permitted to have a part in the arduous tasks involved in the work of the National House and having by the same token been convinced of the steady onward stride of the great medical profession of the United States, wish to congratulate this House and the splendid conferees which you represent on multiplying evidences of growth within our jurisdiction in the science and art of medicine, which we believe is keeping pace with that set by the other favored sections of our common country. We pray that peace, harmony and the spirit of true scientific attainments in medicine may always prevail amongst us to the end that the ever growing responsibility of our profession may meet the challenge which the complexities of our modern life entail.

Respectfully submitted,

ALLEN H. BUNCE, M.D.

E. C. THRASH, M.D.

C. W. ROBERTS, M.D.

Committee.

Dr. Roberts moved the adoption of this report. Motion seconded and unanimously carried.

Dr. E. C. Thrash: I move that the members from each of the Council Districts in which Councilors are to be elected nominate a councilor for this year.

Motion seconded and unanimously carried.

REPORTS OF SPECIAL COMMITTEES

COMMITTEE FOR RELIEF OF NURSING SITUATION

Dr. R. L. Miller, Chairman, presented the following report:

Your Committee appointed to endeavor to secure relief in the nursing situation in Georgia, begs to report:

That through co-operation with the Georgia State Association of Graduate Nurses a bill was introduced and passed at the last session of the State legislature authorizing the licensing of three grades of nurses; the nurse of three years' training, the nurse of one year's training, and the practical nurse. This bill was discussed and agreed to at a joint meeting of the representatives from the Nurses' Association, the Council, the Committee on Public Policy and Legislation and this Special Committee. While the bill is by no means ideal, and was not just what your Committee had in mind, it is a step in the right direction and can eventually be amended to meet the needs. It remains to get the training schools to put on this course of one year.

We, therefore, suggest that a Committee be appointed to take this matter up with the training schools to see if they will put this course on.

Respectfully submitted,

R. L. MILLER,
J. W. DANIEL,
C. THOMPSON,
Committee.

The Secretary: Since this report concerning the nursing situation relates to the address which we will have at our evening meeting from Miss Van de Vrede, whom our President has invited to address us, I move that the discussion on this matter be postponed until this evening, and also until after we have presented a matter from the State Board of Health.

Dr. R. L. Miller: I second this motion and feel sure it will be perfectly satisfactory to the rest of the Committee. While I am on my feet I wish to express my thanks to Miss Van de Vrede for her great assistance in this work.

The motion was then put to a vote and carried.

REPORTS OF FRATERNAL DELEGATES

To visit Alabama: Dr. A. G. Fort stated that Dr. J. M. Anderson, who was to serve as this delegate was ill, and there was no report. He moved that a message of sympathy be sent to Dr. Anderson.

Motion seconded and unanimously carried.

To visit North Carolina: Dr. C. W. Roberts, Atlanta, presented the following report:

Your delegate attended the entire session of the Medical Society of the State of North Carolina, which met in Pinehurst, April 30 to May 2, inclusive, including two sessions of the House of Delegates. He was received with due enthusiasm and had the privilege of one public address at a general session. On invitation, two delegates from the North Carolina

Society were appointed to visit our session, Dr. Strosnider of Goldsboro, and Dr. Presley of Charlotte.

There was much discussion of the need of public hospitals as an economic problem. A suggestion was made that good roads have encouraged too much speed and developed a habit of quick visits and inadequate study of patients.

The program was voluminous, composed of many sections, and combined the work of the State Board of Health and the Board of Medical Examiners. An impressive part of the program was the presentation of tributes, in the form of papers, at one evening session, bearing on members who had died during the year. The President's address was immediately referred to a committee, who reported approval or disapproval of the recommendations therein. In the discussion of papers there was no mention of work by Georgia doctors, indicating the necessity of telling the world more about our section. In North Carolina 65 per cent of the population has local public health supervision. Of about 100 counties a few less than half have full time health officers.

My impression was that programs divided into many sections, with too many agencies participating, are not best. The general meetings were best attended, more interesting, and better papers were presented. I could see evidence of a rift between the physicians located in cities such as Asheville, and those of the rural communities, which reminds one that scientific medicine does not choose its location. There were 317 members in attendance.

To visit South Carolina: Dr. Henry M. Michel, Augusta, presented the following report:

Two of us were appointed, Dr. C. C. Harrold and myself, but Dr. Harrold was unable to attend the meeting. Our worthy President went in his place, and served more or less well. When we arrived we had a perfectly charming reception. The whole society of South Carolina was invited to a barbecue, which was a very excellent barbecue and I will throw out the suggestion that I hope when we rise up and say "Come on to our place next time," we will invite the whole crowd to a barbecue.

There were certain things that I think might be brought to our attention. We have in Georgia, I think, a very important advantage over every other society. We have a secret ballot for all officers. In South Carolina they nominate them as we used to. They have an open House of Delegates. They submit the names of candidates to the Governor for the State Board of Health. If we could

get that through in Georgia I think it would be an important thing. They only allow the Governor to ratify the nominations made by the State Medical Association. Another important thing is that they nominate the trustees of the medical college, and these nominations are ratified by the Governor. Their scientific program was very interesting, and ran along, so far as I was able to judge, about the same as ours. Their attendance was rather larger in proportion to their membership. It was a very successful meeting, and I was glad to be there.

The President: I think none of our other fraternal delegates are present at this time, but I wish to thank those who have given their reports for the able way in which they represented us.

NEW BUSINESS

Dr. M. M. Head: Last year in Athens the House of Delegates passed a rule that we could not have more than one delegate to the American Medical Association from any district of the State. I have known the time when we had two from my district and two from this district. I move that we rescind the rule.

Motion seconded by Dr. Benson and unanimously carried.

Dr. T. F. Abercrombie: Every year there are about 200 school teachers employed during the summer months at the agricultural school and other similar schools. For several years we have made an attempt to make a physical examination of these teachers, but have failed because we have not been able to get the personnel. If possible I would like to have this House of Delegates recommend to the district and county societies that they co-operate with us about making these examinations.

I would also like, if possible, to have the Committee on Public Policy and Legislation sponsor the Ellis Health Law. You heard Dr. Roberts make his report on the North Carolina meeting, and give the number of counties under full health supervision. We have about twenty or thirty, all paying their own expenses. We feel that this matter has gone as far as it can without an appropriation to the smaller bodies to help put on their work. If possible, I would like to have this body recommend an appropriation to help the smaller counties further the work of the Ellis Health Law.

The Secretary: I move that the first of Dr. Abercrombie's suggestions be referred to the Committee on Health and Public Instruction, with power to act, and that the second suggestion be referred to the Committee on Public Policy and Legislation, with power to act.

Motion seconded and unanimously carried.

Dr. N. M. Owensby: I wish to present the following resolution:

Whereas, Georgia has 11,699 hospital beds of all kinds, 5,162 of which are used exclusively for the mentally ill, and

Whereas, the daily average of patients in hospitals of all kinds is 8,940, of which 4,917 are mentally ill, and

Whereas, mental disease has more than doubled in the past thirty years, and

Whereas, the American Psychiatric Association is composed of the leading psychiatrists of the North American Continent, who are devoting their entire time to the amelioration of this condition, and

Whereas, this Association has not met in the South for twenty years, thereby depriving our physicians from obtaining the best information on the methods of combatting mental disorders, therefore, be it

Resolved, that the Medical Association of Georgia invites the American Psychiatric Association to meet in Atlanta in 1929.

Dr. Owensby: I wish to state in regard to this matter that the Fulton County Medical Society has adopted this resolution and has recommended that the invitation be extended, and have already done this. I am a member of the society from Atlanta, and all the Fellows and Associate Members wish to have this meeting in Atlanta, and would like to have an invitation extended by the Medical Association of Georgia.

Dr. Brawner moved that the Medical Association of Georgia invite the American Psychiatric Association to meet in Atlanta in 1929.

Motion seconded and unanimously carried.

Dr. C. W. Roberts: I wish to present the following resolution:

"Whereas, various members of the Medical Association of Georgia desiring to perpetuate in some fitting manner the name of a great Georgia physician, and having in mind by so doing the advancement of scientific medicine in Georgia; and,

"Whereas, in furtherance of this idea a fund is being secured by contribution from members of our Association, which it is hoped may be greatly augmented by other contributions from a like source, as well as from public spirited citizens interested in the advancement of medical science in Georgia; and,

"Whereas, it is proposed to use the proceeds from this fund to provide an honorarium to be presented to outstanding men in medicine invited to give lectures under this foundation; and

"Whereas, the committee desires to present the same as a gift to the Medical Association of Georgia; therefore, be it

“Resolved, first, that the president of our Association, Dr. W. A. Mulherin, be authorized to accept the fund in the name of the Medical Association of Georgia.

Second, that a committee consisting of five members, with Dr. James E. Paullin as Chairman, and four others to be elected by the Medical Association of Georgia, be provided to administer said fund. The term of service of the members of this committee shall be one, two, three, four and five years, its Chairman to serve five years and the term of service of the others to be fixed by election as provided above.

“Be it Further Resolved, that successors to fill vacancies occurring on this committee shall be appointed by the President of the Medical Association of Georgia.

“Be it Further Resolved, that the proceeds of this fund, with such additions as may be made from time to time, shall be deposited with this committee to be invested by them until a sufficient amount is obtained to establish a trust fund for the maintenance of the Abner Wellborn Calhoun Lectureship.

“Be it Further Resolved, that in order to use to the greatest advantage the speaker secured under this fund from year to year the Committee on Scientific Work be requested to fix a definite time on the program for the lecture provided under the fund, and that the same hour be used from year to year.

“Be it Further Resolved, that the committee in charge of the Abner Wellborn Calhoun Lectureship shall have authority, with the approval of the President of the Medical Association of Georgia to invite the speaker for the annual lecture.”

Dr. Roberts moved the adoption of this resolution. Motion seconded.

The Secretary: I move an amendment that the President appoint this committee with Dr. Paullin as Chairman, and that he, after conferring with the Chairman, appoint the other four members.

This amendment was seconded and accepted by Dr. Roberts.

Dr. E. C. Thrash: Dr. Paullin has put untiring work into this matter and it would be absurd to elect the members of this committee through the Association. He is master of the situation, and I think is eminently the man to name those he wishes to have work with him. It is a work to be very proud of. We take no responsibility in accepting this at all. The fund is maintained by free-will offerings. Dr. Paullin has a considerable fund on hand and will get the balance. I only wish to emphasize that Dr. Bunce's amendment is the proper one.

Dr. C. C. Harrold: I think it would be well to amend the amendment to the effect that the President should confer with the Chairman of the fund, whoever he may be, rather than to designate the name of any special person.

Dr. Bunce accepted this amendment, and the amendment, as amended, was put to a vote and unanimously carried.

Dr. Roberts' motion, as amended by Dr. Bunce and Dr. Harrold, was then put to a vote and unanimously carried.

The Secretary moved that Dr. Paullin be extended the privileges of the floor.

Motion seconded and carried.

Dr. James E. Paullin: The only thing I have been interested in was to see if it would not be possible to raise a fund to commemorate the name of a former President of this Association, and at the same time bring to each annual meeting of our beloved Association a man of such distinguished character that he could bring to all of us a message which would be worth while, and which would advance the enthusiasm of the doctors and make us all better practitioners of medicine. This was not my idea, as a matter of fact, but the idea of Dr. Boland, who first suggested this thing in his presidential address some years ago. If I have been of assistance in this matter, I am very glad, and wish to thank the members of the House of Delegates for their aid. While you are putting on me the burden of selecting this committee, so far as the work is concerned, I am glad of that, but I hope the House of Delegates will always assist us. Dr. de Schweinitz comes as our first guest under this lectureship fund. It is of interest that we should have such a man open our lectureship, and while our fund is not yet sufficient for the interest to cover his expenses this will be taken care of by private means.

The President: The Chair wishes to thank you and Dr. Boland for your work in sponsoring this lectureship, for I think you have done something well worth while and are worthy of our commendation.

The Chairman of the Council has requested me to announce that there will be a meeting of the Council immediately following the evening meeting of the House of Delegates.

I wish further to announce that in addition to the regular business this evening we will have an address from Miss Van de Vrede of the Nurses' Association.

On motion the House of Delegates adjourned at 6:00 to reconvene at 8:00 p.m.

SECOND MEETING

TUESDAY, MAY 8, 1928

The House of Delegates was called to order at 8:40 a.m. by the President, Dr. W. A. Mulherin, Augusta.

ROLL CALL

The Secretary stated that he held in his hand the signed roll call of thirty-one delegates and councilors, and moved that this constitute the roll call for this meeting. Motion seconded and carried.

Those present were:

William H. Myers, Councilor 1st District.
E. T. Coleman, Emanuel County.
F. D. Patterson, Randolph County.
W. C. Miles, Spalding County.
O. W. Roberts, Councilor 4th District.
M. M. Head, Councilor 6th District.
C. K. Sharp, Councilor 2nd District.
F. K. Boland, Ex-President, Fulton Co.
J. G. Dean, Ex-President, Terrell Co.
R. L. Miller, Burke County.
James N. Brawner, Fulton County.
C. L. Ridley, Bibb County.
R. H. Chaney, Richmond County.
A. G. Fort, Fulton County.
C. L. Ayers, Councilor 9th District.
E. C. Thrash, Councilor 5th District.
C. W. Roberts, Fulton County.
W. F. Reavis, Ware County.
M. B. Allen, Jackson County.
G. Lombard Kelly, Richmond County.
W. A. Selman, Fulton County.
Paul L. Holliday, Clarke County.
Dan Y. Sage, Fulton County.
William D. Gholston, Madison County.
J. M. Byne, Burke County.
Cleveland Thompson, Jenkins County.
J. W. Palmer, Ex-President, Montgomery County.

J. S. Beard, Tri-County Society.

B. E. Miller, Evans County.

S. J. Lewis, Councilor 10th District.

Marion T. Benson, Fulton County.

S. L. Vinson, Coffee County.

President Mulherin and Secretary Bunce.

President Mulherin declared a quorum present and the House duly constituted for the transaction of business.

MINUTES

The Secretary moved that the minutes be accepted as published in the Transactions in the Journal.

Motion seconded and carried.

The President introduced Miss Van de Vrede, the head of the Georgia State Nurses' Association, who read a paper entitled, "Are We Facing a Nursing Crisis in Georgia?"

(Address published in June Journal.)

The President, on behalf of the House of Delegates, thanked Miss Van de Vrede for

her kindness in coming before the House and presenting such a timely and excellent paper.

UNFINISHED BUSINESS

The Secretary: This afternoon we passed a motion to take up Dr. Miller's resolution this evening immediately after Miss Van de Vrede's address. I also have a letter from the Director of Laboratories, Georgia State Board of Health, and a resolution presented by the Committee on Constitution and By-laws. The resolution is as follows:

Resolved, that the Committee on Hospitals be increased to five members; that the term of each member be five years, except that the terms of those appointed this year be for one, two, three, four and five years respectively; that President Mulherin appoint this committee after conferring with the present Committee on Hospitals.

Be it further resolved, (1) That this Committee proceed with the organization of a State Hospital Association, as recommended by the present Committee, and approved by this House of Delegates.

(2) That this Committee co-operate with the Georgia State Nurses' Association to study the needs and formulate a program to be presented at the next annual session of their respective organizations.

(3) That this Committee co-operate with the State Board of Health as requested by its Director of Laboratories to make a survey of the laboratories in Georgia, doing public health work, and such private clinical laboratories as voluntarily agree to co-operate in this survey, to the end that these laboratories be standardized as to minimum requirements.

(The letter received from the Director of Laboratories is published herewith to clarify this last provision.)

April 24, 1928.

Dr. Allen H. Bunce, Sec.-Treas.,
Atlanta, Ga.

Dear Dr. Bunce:

The need for the standardization of public health laboratories in Georgia has come to our attention. The same factors governing this need apply also to private clinical laboratories doing public health work. The logical source of standardization of public health laboratory work in Georgia would be the State Board of Health Laboratory working under the direction of the State Health Commissioner. Accordingly we are making plans to this end, but at present we have not yet decided as to the best course of procedure.

As stated above, private clinical laboratories operated by individuals, hospitals or groups of physicians also do a certain amount of public health work, but we would prefer the Medical Association of Georgia before in-

cluding these in our program. If your society does endorse the plan, it is possible that you would like to include standardization of all phases of laboratory work in any way pertaining to diagnosis of disease (with the possible exception of X-ray photography). Since the State Laboratory would be qualified to set standards only for public health work, an official body representing the Medical Association of Georgia would have to be appointed by your organization with power to work in conjunction with the State Laboratory in this standardization program. Perhaps it is too soon to consider such a comprehensive project, nevertheless we would appreciate an expression from your society.

While the plan of procedure has not yet been decided, it has occurred to me that the certification plan now employed by such states as California and New York be considered. In substance this is briefly as follows: The State Laboratory will prepare a code of minimum requirements for all laboratories doing public health work, based on equipment, qualification of personnel, etc., making certain modifications to fit various types of laboratories. In addition efficiency tests would consist of series of test specimens supplied by the State Laboratory. All laboratories desiring certification would be graded accordingly. All certified laboratories would receive due recognition both by the State Board of Health and by the Medical Association of Georgia and would be published in the official organs of both organizations. Laboratories not able to certify or not willing to apply for certification would not be recognized.

We feel confident that standardization by some such plan would operate to the mutual benefit of the State and the individual laboratory. The quality of work would be greatly improved and a better relationship between the physician and the laboratory would exist.

Yours very truly,

T. F. SELLERS,
Director of Laboratories,
State Board of Health.

Dr. Bunce moved the adoption of this resolution.

Motion seconded and unanimously carried.

The Secretary: Perhaps all of the members of the Association are familiar with the Robinson amendment to allow physicians to deduct their traveling expenses in attending scientific meetings from their income tax report. This came before the Finance Committee of the Senate, and our Senator from Georgia (Hon. W. F. George), who was a member of this Committee, assisted us in getting it passed. We also had a letter from our other Senator (Hon. W. J. Harris), who was not

on the Committee but said he would be glad to help in any way he could. Senator Pat Harrison sent us a letter stating that the amendment was lost, and the motion to restore it was lost again. Notwithstanding that it was lost, I feel that we should send a telegram of thanks to these men for volunteering to help us.

Another thing has come up, in regard to the \$3.00 narcotic tax, which was reduced to \$1.00 several years ago, and which they have tried to increase again to \$3.00.

Dr. J. G. Dean: I received a letter from Senator Harris regarding the deduction of traveling expenses. I acknowledged it and asked him if he would not try to get other senators interested, and get them to allow us to deduct the traveling expenses we so frequently incur in attending post-graduate courses. He said he would be glad to do all he could for us.

Dr. W. H. Myers: I would like to enlarge a little on what Dr. Bunce said regarding this measure. In the Journal of the American Medical Association that came out yesterday there is an article on this question as well as an editorial in which the Editor urges every practicing physician in the country to send Secretary of Treasury Mellon and their respective Senators a special delivery letter, or a telegram at once, protesting against this proposed raise. It is not a just measure. It was stated at first that the tax was merely to cover expenses and was not a tax in the true sense of the word, but now they admit that the \$2.00 additional is a tax, and I wish to urge that everyone send a telegram to our Senators as well as to Secretary Mellon.

Dr. E. C. Thrash: This action is not only unjust but unconstitutional. As physicians we are given a license to practice medicine and to use everything that will assist in the care of the sick. It is not right to put a tax on narcotics any more than on any other drugs.

Dr. Marion T. Benson: I move you, sir, that our Secretary write or wire to Senator Harris and Senator George thanking them for their efforts, and asking them to continue whatever they can do along this line.

Motion seconded and unanimously carried.

The Secretary then read a wire which he had received from Senator Pat Harrison.

Dr. J. W. Palmer: I move you, sir, that we protest to our Senators against this proposed tax on narcotics.

Motion seconded.

Dr. E. C. Thrash: I would offer an amendment that we add to this protest that the Association feels that to tax any drugs used by the profession is unjust and unconstitutional.

Dr. Palmer accepted this amendment, and the motion as amended, was put to a vote and unanimously carried.

The President: I would ask that the delegates from the Fifth, Sixth, Seventh and Eighth Districts get together and select their nominees for Councilors, in compliance with the action of the House this afternoon.

On motion regularly seconded and carried the House of Delegates adjourned at 9:30 p.m., to reconvene at 8:00 a.m. Friday.

THIRD MEETING

FRIDAY, MAY 11, 1928

The House of Delegates was called to order at 8:20 a.m., by the President, Dr. William A. Mulherin, Augusta.

ROLL CALL

The Secretary stated that he held in his hand the signed roll call of thirty-eight delegates and councilors and moved that this be accepted as the official roll call for this meeting.

Motion seconded and carried.

Those present were:

M. J. Egan, Chatham County.
O. W. Roberts, Councilor Fourth District.
C. W. Roberts, Fulton County.
G. L. Kelly, Richmond County.
E. C. Thrash, Councilor Fifth District.
Paul L. Holliday, Clarke County.
W. C. Miles, Spalding County.
Frank K. Boland, Ex-President.
W. H. Garrison, Habersham County.
C. K. Sharp, Councilor Second District.
M. B. Allen, Jackson County.
Dan Y. Sage, Fulton County.
W. F. Reavis, Ware County.
Frank R. Mann, Telfair County.
J. M. Smith, Lowndes County.
Marion T. Benson, Fulton County.
J. O. Elrod, Ex-President.
M. M. Head, Councilor 6th District.
John M. Anderson, Lamar County.
G. Y. Moore, Councilor 3rd District.
F. D. Patterson, Cuthbert.
A. G. Fort, Fulton County.
James N. Brawner, Fulton County.
Ernest F. Wahl, Thomas County.
C. L. Ridley, Bibb County.
C. L. Ayers, Councilor 9th District.
W. A. Selman, Fulton County.
William H. Myers, Councilor 1st District.
B. E. Miller, Evans County.
F. B. Blackmar, Columbus.
E. M. Lancaster, Jasper County.
Ralph H. Chaney, Richmond County.
J. W. Palmer, Ex-President.
G. T. Harper, Hart County.
J. V. Rogers, Grady County.
C. F. Holton, Chatham County.

R. L. Miller, Burke County.

E. T. Coleman, Ex-President.

The President declared a quorum present and the House duly constituted for the transaction of business.

MINUTES

The Secretary: A motion was made at the last meeting that we accept the minutes as they will appear in the Journal, as it is manifestly impossible for our official stenographer to prepare them for us between meetings. I repeat that motion.

Motion seconded and unanimously carried.

The Secretary gave a brief report of what had been done by the House at previous meetings.

Dr. E. C. Thrash: There is one thing in the By-Laws that will have to be voted upon. We offer an amendment after we adopted them to the effect that at this meeting the men in attendance from the V, VI, VII, and VIII Councilor Districts should meet and nominate their Councilors, and the General Assembly will take action thereon.

I move that this amendment be adopted.

Motion seconded and unanimously carried.

COMMITTEE REPORTS (Supplementary)

The Secretary: We have a supplementary report from the Committee on Public Policy and Legislation in the way of a letter which Dr. Waits received from Mr. Middlebrooks, which I will read:

"Dr. Charles E. Waits, May 8th, 1928.
DeSoto Hotel, Savannah, Ga.

Dear Dr. Waits:

"Before you have printed the Basic Science Bill, which we corrected and turned over to you last week, we would like to examine the printer's proof.

"This Bill will be bitterly opposed, as it was last year, and in order to have it passed it will be necessary to convince the members of the General Assembly that it is not aimed at any particular class or classes of practitioners of the healing art. Often one hears the Bill referred to as a Bill to abolish some particular class of practitioners, but, as you know, such is not the case. Every one practicing the healing art comes within its provisions, and no one practicing any branch of the healing art is eligible for membership on the Board of Examiners. It can not be fairly charged that the members of the Medical Association of Georgia would dominate the Board. From a numerical standpoint they would have the right to dominate it, but the Board would be composed of men who are not practicing. Surely no one undertaking to practice the healing art should object to being required to pass the educational and other requirement set out in the Bill.

"These are the things that the members of the Association should endeavor to impress upon the members of the General Assembly and the candidates who are to be elected this fall.

"We do not think that any member of the Association should in his arguments for the Bill disparage or belittle any class of practitioners of the healing art. Any branch of the healing art will be raised to a higher degree of proficiency if its members are able to and are required to pass satisfactory examinations in the basic sciences. Every member of the Association should make it a point to discuss the Bill with the members of the House and Senate from his county, and to convince them of the educational benefits of the Bill. This should be done as soon as possible, and it should be kept before the members of the General Assembly from time to time.

"In regard to the work to be done when the General Assembly meets, I would like to think about that further and discuss it with you. One thing is certain: I believe a professional lobbyist would hurt the cause. Possibly we could select some reliable man to watch the progress of the Bill after it is introduced, but we could decide on that later. If the Bill can not be passed on its merits, then it should not be passed. I agree with you that it should be passed, and the task before the Association is to convince the members of the General Assembly of its wisdom.

With kind regards, I am,

Very truly yours,

(Sgd.) GROVER MIDDLEBROOKS."

Dr. James N. Bawner: I move that this supplementary report be accepted, and that the program committee ask Dr. Waits, or some other man who is familiar with legislative affairs, to read a paper before the Association next year, informing us of the legislative affairs that are to come up for consideration.

Motion seconded and unanimously carried.

COMMITTEE ON MEDICAL DEFENSE

The Secretary: Dr. Thrash is the only member of this Committee who is present, except Dr. Sharp and myself by virtue of our offices. The Committee reports that they have had seventeen damage suits, amounting to \$270,500.00. It has cost the Association \$2,012.35, exclusive of our attorneys' retainer fee, which is \$1,250.00. I think the appropriation for that comes up under the report of the Council. I am glad to say that no suit has been lost.

The President: If there is no objection the report of the Committee on Medical Defense will be accepted as read.

COMMITTEE ON HEALTH AND PUBLIC INSTRUCTION

Dr. Theodore Toepel, presented the following report:

I wish to make a report on the health examinations. The unexpected has happened. We thought we would have more men than women applying for these examinations, but the reverse was true. Men evidently do not want a record of their physical condition, but that does not alter the matter. This matter should be understood by every physician, for unless they are examined and know their own rating they can not put these examinations over for their patients.

We recommend that the House of Delegates request the Scientific Committee of next year to include this item on their printed program, that a demonstration of these examinations will be given at the meeting.

Second, we heard the report of our fraternal delegate from Tennessee, and I wish to call your attention to the fact that this same recommendation was offered by your committee in the report which was adopted at our first meeting. At the same time we asked an appropriation, for it requires time to put this matter over properly. We must educate the public and ourselves.

I wish to especially mention the publication called "Hygeia." Our doctors seem to be a little indifferent about putting this magazine in their offices. The ladies have done more toward making "Hygeia" popular than the doctors. We recommend that the county societies make it a special order of business at some of their meetings to make a survey of the number of subscribers having "Hygeia" in their libraries and their public schools, and that where they can not afford to subscribe the county society do this for them. This has been done in a number of states.

The President: If there is no objection this report will be adopted as given. The recommendations are good.

AUDITING COMMITTEE

Dr. M. M. Head, Chairman, presented the following report:

"We, the Committee appointed to examine the books of the Secretary-Treasurer, from the annual meeting in May, 1927, to the annual meeting in May, 1928, have checked each voucher and each bank deposit, and have found same neatly and correctly kept.

"We find that there is a balance of \$4,720.57 in the treasury at present.

Respectfully submitted,

M. M. HEAD, C. L. AYERS,
W. H. MYERS."

(Continued on page 383)

THE JOURNAL

OF THE
MEDICAL ASSOCIATION OF GEORGIA
Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

AUGUST, 1928

ALLEN H. BUNCE, M.D., Editor
H. L. ROWE, Business Manager

Publication Committee

E. C. THRASH, M.D., Chairman
A. S. M. COLEMAN, M.D.
M. M. HEAD, M.D.

Articles are accepted for publication on condition that they are contributed solely to this Journal.

Manuscripts should be typewritten, double-spaced, and the original (not the carbon copy) submitted. Used manuscript is not returned unless requested.

Communications and items of general interest to the profession are invited from all parts of the State. We especially invite county society secretaries to send us information of happenings in the county that would be of interest to the members throughout the State.

Reprints should be ordered within 30 days after the appearance of an article, since all type will be destroyed at the end of that time.

Editorial Department

LIFE INSURANCE REPORTS

How much time and vexation of spirit have you spent during these hot months filling out reports for life insurance companies on patients whom you have treated during the past several years? Has any case arisen where you were in doubt as to your duty? Has there, perhaps, been some man or woman whom you have treated without telling him or her the nature of the illness—keeping it safe in your private records—only to receive a form duly signed by the individual asking you to give all the facts to an insurance company? Suppose you could not communicate with the individual and tell him or her personally why you didn't want to give out the information without a clear understanding on his or her part of the nature of the illness. What did you do? Have some of the officials of the insurance company been discourteous enough to be almost insulting because you refused to give the information sought when you felt

duty bound not to give it unless you could have a personal consultation with the applicant? One such experience has recently occurred to the writer on the part of representatives of one of our largest national life insurance companies. (Name furnished on request.)

This is a serious problem and with the increasing popularity of the Periodic Health Examinations it will become more and more serious. The applicant signs the request and it is forwarded to you by the insurance company. Then your troubles begin. Perhaps the patient had many examinations and treatments in your office and a sojourn in a hospital followed by visits in the home. To give the complete record may require several typewritten pages in addition to the time of getting all the records together. If you do not send in the information promptly you receive a second, third and fourth request—each more urgent than the preceding. Several of your patients or former patients may apply for insurance within the same week or month and you receive the forms when you scarcely have time to look after your practice. Yet you are expected to drop every thing and immediately send all the information you have to the insurance company. It is stated on the form that you are doing it at the request of and for the benefit of the applicant. In view of the many contested claims reported in the daily papers you dare not, in the interest of the applicant's family, omit any essential information and not knowing what the company considers "essential" your only recourse is to send in all the information in your possession. Is the information given solely for the benefit of the applicant? How many insurance companies could remain in business if they didn't earn a profit? This being true why shouldn't they be charged a fee for every such form filled out? We believe in life insurance and must pay the premiums, then why should not the insurance company pay us for our services? We believe that every physician who completes such a form should send along his bill with the form. The fee might be in accordance with the time required to furnish the information.

The charging of a fee for services such as these meets the approval of the House of Del-

legates of the American Medical Association as shown by the following resolution unanimously adopted on May 17, 1927:

"Resolved, That it is the sense of the American Medical Association as represented by this House, that the members of the American Medical Association are under no moral or legal obligations to furnish professional services or expert professional opinion concerning any patient, or reports concerning professional services rendered any patient, to insurance or indemnity companies, to industrial concerns or their agents, or for the benefit of any third party, unless paid the customary fees charged by the medical men of that community for similar services rendered to private patients."

The Editor will be glad to conduct an open forum on this question so as to feel the pulse of our membership. All communications "pro" and "con" will be published. What is your opinion?

THE BASIC SCIENCE LAW

To paraphrase a popular quotation: "Now is the time for all loyal members to come to the aid of their Association." A copy of the Basic Science Bill has been sent to every member of the Association. Many copies have been sent to the officers of the county and district societies. Read the proposed law so as to become thoroughly familiar with its provisions. Then make it your business to interview the prospective members of the Legislature from your county and ascertain their position. Now is the time to do your work. This is fundamentally an educational measure designed to elevate the educational standards of all those who practice the healing art. It does not apply to any one now practicing under any of the respective Boards in the State. Surely every one who undertakes to treat the sick should have a thorough knowledge of the basic sciences. There is no valid argument against the bill once its provisions are understood. It was passed by the Senate last year, but failed of final passage or defeat by not being brought to a vote in the House because of the "jam" in the last few days of the session. If every

member of the Association will do his duty it should be promptly passed at the 1929 session of the Legislature.

A MESSAGE FROM OUR PRESIDENT

To the members of the Medical Association of Georgia:

I take this method of stressing the importance of the proposed Basic Science Law on the members of the Medical Association of Georgia, and urge you individually and collectively to work unceasingly for its successful passage in both houses of the next Legislature.

By concert of action every Senator and Representative, after having its great benefit to the public brought to their attention will, I am sure, support the measure. Let us not depend entirely on the Committee on Public Policy and Legislation to do this most constructive work; their function is to round-up and bring to a focus the work done in the field by the members at large, so, let us be "up and doing" and fight this great question out on its merits.

Another matter: Unless a larger membership is enrolled, it seems necessary that the dues be raised. We have now 1,600 members out of approximately 3,000 physicians. We have a great and influential Association; the greater an institution is and the greater its influence, the greater is the expense of maintaining it. We should by all means have 2,000 members by April 1, 1929. This number will avoid the necessity of raising the dues; let us strive to bring the membership up to this mark. Don't depend entirely on the county Secretary to enroll the men. It should be the ambition of not only the Secretary but of every member of the County Society to see to it that every eligible physician is made a member. Let me urge each Secretary to call any one or all the members to help him round up those who are not members; *I know this can be done* if we go at it in the right way. We have one, 100% District in the State; it is possible to have twelve.

Fraternally,

C. K. SHARP, M.D.

Georgia Tuberculosis Association

OFFICERS AND STAFF

| | | | |
|--------------------|---------------------------------|--------------------------------|---------------------------------|
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| Z. S. Cowan, M.D. | Atlanta | Allen H. Bunce, M.D. | Atlanta |
| C. C. Aven, M.D. | Atlanta | Stewart R. Roberts, M.D. | Atlanta |

PHYSICAL EXAMINATION IN THE DIAGNOSIS OF TUBERCULOSIS

The examination of the lungs for the detection of a tuberculous process requires the most exacting attention on the part of the examiner. The patient should be stripped to the waist and the room should be between 70 and 75 degrees F. If lower, it causes fibrillary twitching in the muscles of the chest and, if higher, it may prove uncomfortable for the doctor. The patient should be seated on a revolving stool, with hands placed over the lap. His position should be easy, natural and comfortable, not taut, strained or on edge.

Many physicians prefer to examine the posterior chest first, since here the major portion of the lung is projected on the surface, and the annoyance of coughing in one's face or other distracting factors is at once avoided. With the patient and the doctor comfortably set, the chest is inspected and any changes in its symmetry noted—whether there are retractions in the supra-spinous fossa of one side or the other, whether the expansile movement of the thorax is equal, or whether there is lagging. These findings are supplemented by palpation, as a result of which the condition of the muscles and over-lying tissues is determined—whether there is atrophy of local groups of muscles or whether there is spasm, or both atrophy and spasm. The palpatory determination of alteration in expansile movement of the chest is of great importance.

In percussing a chest it is well to establish the normal for each particular individual. This is best done by light percussion over the lower chest and using the quality of note

heard as a standard, with proper allowance for such modification as the topography of the chest warrants. With a patient's normal note firmly established, it is relatively easy to determine even slight changes. Often a chest must be percussed in its entirety a dozen or more times before the examiner can feel reasonably certain that a particular area presents an impaired note.

In auscultation it is important to establish the normal quality of each patient's breath sounds during quiet, easy breathing, and then note any changes from this normal. Harshened or roughened or granular types may prove the very first and only evidence of a localized tuberculous infiltration. The harsh broncho-vesicular or bronchial types in which expiration is lengthened may signify an old fibrotic process which has burnt itself out, and needs only cautious advice and no treatment.

Changes in the whisper sounds are of great importance. Indeed this is often the only definite evidence on which a diagnosis of early tuberculosis can be made. Listen with the naked ear away from the chest, before listening for changes in the whisper sounds with the stethoscope. Be sure that the patient is repeating the words or numbers with the exact force desired.

The most significant finding in an examination of the chest from the standpoint of a tuberculous involvement of the lung is the rale. Bushnell defines the rale as the sound produced by the passage of air through tubes in the presence of moisture. According to this definition there is no such thing as a dry rale, and every rale represents moisture in the area

District and County Societies

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President.....Franklin, R. C., Swainsboro
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Sec'y-Treas.....Cheek, O. H., Dublin

1928 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 20, 1927.

2. Turner County, Dr. J. H. Baxter, Ashburn, November 15, 1927.

3. Terrell County, Dr. Logan Thomas, Dawson, December 1, 1927.

4. Pike County, Dr. M. M. Head, Zebulon, December 3, 1927.

5. Ben Hill County, Dr. L. S. Osborne, Fitzgerald, December 8, 1927.

6. Evans County, Dr. S. T. Ellis, Claxton, December 29, 1927.

7. Taylor County, Dr. J. C. Hind, Reynolds, January 3, 1928.

8. Jasper County, Dr. E. M. Lancaster, Shady Dale, January 6, 1928.

9. Talbot County, Dr. C. C. Carson, Talbotton, January 28, 1928.

10. Wayne County, Dr. M. N. Stow, Jesup, February 9, 1928.

11. Elbert County, Dr. B. B. Mattox, Elberton, March 1, 1928.

12. Lamar County, Dr. Jno. M. Anderson, Barnesville, March 6, 1928.

13. Terrell County, Dr. Logan Thomas, Dawson, March 7, 1928.

14. Stephens County, Dr. C. L. Ayers, Toccoa, March 8, 1928.

15. Upson County, R. L. Carter, Thomas-ton, March 15, 1928.

16. Crisp County, Dr. J. N. Dorminy, Cordele, April 5, 1928.

17. Henry County, Dr. H. C. Ellis, McDonough, April 10, 1928.

18. Dougherty County, I. M. Lucas, Albany, June 6, 1928.

19. Dooly County, Dr. F. E. Williams, Vienna, June 29, 1928.

20. Macon County, Dr. C. P. Savage, Montezuma, June 29, 1928.

21. Stewart-Webster Counties, Dr. J. M. Kenyon, Richland, June 29, 1928.

22. Sumter County, Dr. Henry A. Smith, Americus, June 29, 1928.

23. Emanuel County, Dr. R. C. Franklin, Swainsboro, July 3, 1928.

DISTRICT HONOR ROLL

1. Third District, Dr. G. Y. Moore, Councilor, Cuthbert, June 1, 1928.

NEW MEMBERS FOR 1928

Davis, S. C., Atlanta
 Elliott, W. G., Cuthbert
 Hutchins, J. T., Atlanta
 Kelley, Geo. W., Carlton
 Martin, W. O., Atlanta
 Mobley, J. W., Sr., Milledgeville
 Norris, J. C., Decatur
 Schley, Francis B., Columbus
 Shippey, S. H., Atlanta
 Wiley, Jno. D., Milledgeville
 Wood, J. G., Atlanta

SIXTH DISTRICT MEDICAL SOCIETY

The summer meeting of the Sixth District Medical Society was held at Indian Springs, Wednesday, July 11. President, Dr. W. C. Miles, Griffin, presided. After the invocation by Dr. W. C. Humphries, Griffin, and the passing of a motion extending the floor to the visiting physicians during the discussion of papers and clinical cases, the following scientific program was carried out:

Dr. W. C. Humphries, Griffin—Our Tuberculosis Problem. Discussion by Drs. M. M. Head, C. K. Sharp and J. O. Elrod.

Dr. C. K. Sharp, Arlington, President, State Medical Association, was introduced to the Society by Dr. J. O. Elrod. After which Dr. Sharp made a most interesting talk during which he expressed his appreciation of the high honor that had been conferred upon him by the State Association, and outlined some of the policies and legislation the Association hopes to put through in the near future.

Dr. G. Y. Massenburg, Macon—The Radical Treatment of Carbuncles. Discussion by Drs. O. H. Weaver, A. R. Rozar and F. A. White.

Dr. A. H. Frye, Griffin—Co-existing Tubal and Uterine Pregnancy—Case Reports. Discussion by Drs. O. H. Weaver and O. R. Thompson.

Dr. A. G. Fort, Atlanta—Treatment of Chronic Otitis Media with Zinc Ionization. Discussion by Dr. J. O. Elrod.

Dr. J. H. Copeland, Griffin—New Type of Gastrostomy for Carcinoma of the Oesophagus—Case Reports. Discussion by Dr. O. H. Weaver.

Dr. W. C. Pumpelly, Macon—Indigestion, its Relation to Gall-bladder Disease. Discussion by Dr. G. Y. Massenburg.

After completing the scientific program the Society adjourned for dinner which was served in the dining room of the Hotel Foy. A most delightful chicken dinner was served.

After dinner the President called the Society to order in business session.

Dr. M. M. Head, Zebulon, who was re-elected Councilor of the Sixth District at the Savannah meeting, made a most interesting talk, during which he expressed his appreciation of the honor the Society had conferred upon him.

A motion was made and passed that the Sixth District Society ratify the action of those members present at the Savannah meeting in electing Dr. Head, Councilor for the next three years.

Drs. O. H. Weaver, G. Y. Massenburg, A. R. Rozar, O. R. Thompson and Dr. J. O. Elrod were appointed by the President as a committee to draw up Resolutions relative to the death of four of our members, Dr. Lee Byron, Jackson, Dr. W. J. Little, Macon, Dr. N. T. Carswell, Macon and Dr. G. L. Alexander, Forsyth. The Society moved that a copy of the Resolutions be sent to the family of each deceased, a copy be sent to the State Medical Journal for publication and that a copy be placed in the minutes of the Society.

It was announced by the Secretary that the scientific program of the fall meeting will be taken over by the Extension Committee of the University of Georgia. The fall meeting will be held in Macon, meeting as the guest of the Macon Medical Society of Bibb County.

O. R. THOMPSON, M.D.,
 Secretary.

Macon.

Resolutions upon the death of

Dr. J. W. Little, Macon

Dr. Lee Byron, Jackson

Dr. N. T. Carswell, Macon

Dr. G. L. Alexander, Forsyth

Whereas, the death of Dr. W. J. Little, Dr. Lee Byron, Dr. N. T. Carswell, and Dr. G. L. Alexander has removed from our roster, four of our beloved members, and,

Whereas, their labors with us and among a large number of patrons will ever be remembered,

Therefore be it resolved, That in their passing, The Sixth District Medical Society has suffered the loss of true and upright members, and their communities honorable citizens,

That our sympathy goes out to those near and dear to them in their sorrow. That a page in our minutes be set apart in respect to their memory. That a copy of these resolutions be sent to the families of our deceased friends, and that a copy be sent to the Journal of the Medical Association of Georgia for publication.

Respectfully submitted,

Dr. O. H. WEAVER,

Dr. G. Y. MASSENBURG,

Dr. A. R. ROZAR,

Dr. J. O. ELROD,

Dr. O. R. THOMPSON.

Georgia State Nurses' Association

OFFICERS

| | |
|-------------------------|---|
| President..... | Miss Annie Bess Feebeck, R.N. Grady Memorial Hospital, Atlanta |
| 1st Vice-President..... | Miss E. Alma Brown, R.N. University Hospital, Augusta |
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| Treasurer..... | Miss Jane Van De Vrede, R.N. 105 Forrest Ave., N.E., Atlanta |

THE N. L. OF N. E.

The relation of nursing to educational institutions, and problems connected with the instruction and conduct of nursing schools, was the general theme of a series of meetings of the National League of Nursing Education, held in conjunction with the conventions of the American Nurses' Association, and the National Organization of Public Health Nursing, in Louisville, Ky., June 4-9.

Miss Carrie M. Hall, president of the League, presided over all business sessions. In her address she summarized the accomplishments of the League since the last Biennial, referring to the leaders as a "group of honest women, searching for the truth concerning themselves and their work."

"Perhaps the two greatest pieces of work of the League have been the completion and publication of the Curriculum for schools of nursing, and the Conference on Nursing Schools connected with Colleges and Universities" said Miss Hall. "The educational work of a profession must of necessity be its very backbone, and at the end of the three years as president of this body, I am more than ever convinced that the function of this organization, in directing the preparation of the nurses of the country, is quite the most far-reaching in its results and, therefore, of the greatest importance, of any of our professional activities."

Twenty-three of the twenty-eight existing State Leagues reported during the session. Those working in close co-operation with the State Boards of Nurse Examiners have set a fine example. Practically all are supporting the major activities of the National in the use of the National Curriculum. Many are actively promoting institutes and other edu-

cational projects. One state has fostered summer courses; another has worked for the endowment of a school of nursing in the University.

True scientific investigation into questions pertaining to the conduct of nursing schools has been the object of the League through its state organizations.

Many splendid papers were given during the session. Miss Daisy Dean Urch of the Highland Hospital, Oakland, California, presented a paper on "Study of the Position and Preparation of Director of Nursing Schools," based on replies received to about two hundred questionnaires sent out to directors of nursing schools, ninety-nine per cent of whom appear to "like their jobs." Among the difficulties encountered are "not enough time and energy to do the very multitudinous duties"; "not enough prepared assistants"; "small budget," etc. Despite all difficulties, 95% of the directors write cheerfully and hopefully, according to Miss Urch.

"The position and preparation of the Head Nurse," a paper by Mary M. Garvin of Bellevue and Cordella Cowan of the Women's Hospital, New York City, brought out the importance of this position in every school of nursing. "Of primary importance" say the authors "is a broad knowledge of her clinical specialty, such as medical or surgical diseases, in order that she may be able to think and act intelligently in relation to her patients. Skill in ward management, success in managing people, the ability to teach and develop students, are of almost equal importance." Miss Marvin discussed several types of "staff education."

Miss R. Louise Metcalfe of Teachers' College gave a paper on "Achievements of Nurses in Relation to Intelligence Test Ratings." She

stated that the large percentage of dropouts from schools—in some cases fifty per cent—coupled with the increasing cost of nursing give ample reason for the effort to find a basis of measurement. "The study indicates that the chances of the nurse in being successful with her practical work are excellent if she has a good score in theory," declared Miss Metcalfe.

Dr. Stephen Rushmore of Boston, presented a paper on "Nursing and Maternal Welfare," stressing the importance of nursing and, therefore, of nursing education. "Among all the other things that education may be, we must not forget that it is essentially religious," said Dr. Rushmore.

Miss Blanche Pfefferkorn, executive secretary of the N. L. of N. E., gave an historical review of the improvement in nursing service. She said that the beginning of advancement was made during the World's Fair, Chicago, in 1893, when the nurses of the world gathered there and formed a national nursing organization. Miss Pfefferkorn recalled the various steps taken by different organizations up to the present time, and attributed the high standards of the profession now to the foundation work of these pioneer groups.

The educational session closed with a conference on "Practical Nursing Problems Relating to Schools of Nursing," Miss Sally Johnson, superintendent of nurses of the Massachusetts General Hospital, Boston, presiding.

A full report will be issued by the League in September.

During the final business session, Miss E. C. Burgess was elected president of the N. L. of N. E., succeeding Miss Carrie M. Hall, retiring president. Miss Burgess is a native of New England and a graduate of Roosevelt Hospital School of Nursing, New York City. Practically her whole life has been spent in nursing education, though she found time for a period of private duty. She has been assistant superintendent of Roosevelt; taught in Bellevue and St. Luke's, New York, and later in the Michael Reese Hospital School of Nursing, Chicago. Still later, upon her return to New York state, she was inspector of nursing schools, and during the World War period she was released for duty as assistant

inspector of nursing service in the Office of the Surgeon General of the United States Army. After the war she became secretary to the Board of Nurse Examiners and lecturer at Teachers' College, Columbia University, from which institution she holds the B.S. and M.A. degrees. She is now associate professor of nursing education of Teachers' College. Miss Burgess has been active in both the League and State Nurses' Association, having been a member of the National League's Committee for the study of nursing education in colleges and universities; also one of the League's representatives on the Committee on the Grading of Nursing Schools. At this time she is Chairman of the Official Registry Committee of District 13 of the New York State Nurses' Association, of which organization she has been both vice-president and president.

MEETING OF CHATTAHOOCHEE VALLEY MEDICAL AND SURGICAL ASSOCIATION

At a meeting of the Association held at Warm Springs, Georgia, July 10 and 11, the following officers were elected:

President, W. J. Love, M.D., Opelika, Alabama; First Vice-President, John A. Keyton, M.D., Dothan, Alabama; Second Vice-President, Francis B. Blackmar, M.D., Columbus, Georgia; Secretary and Treasurer, C. W. Roberts, M.D., Atlanta, Georgia.

Board of Council: A. L. Harlan, M.D., President; Alexander City, Alabama; Frank K. Boland, M.D., Atlanta, Georgia; George H. Cooper, M.D., Opelika, Alabama; Gilbert F. Douglas, M.D., Birmingham, Alabama; Hugh McCullough, M.D., West Point, Georgia.

Program Committee: Marion T. Benson, M.D., Chairman, Atlanta, Georgia; C. H. Richardson, Jr., Macon, Georgia; W. T. Davidson, M.D., Birmingham, Alabama; W. L. Cooke, M.D., Columbus, Georgia; Earl F. Moody, M.D., Dothan, Alabama.

EXPULSION OF ITS CONTENTS AS FUNCTION OF GALLBLADDER

W. J. Merle Scott and Lester R. Whitaker, Rochester, N. Y. (Journal A. M. A., July 7, 1928), state that expulsion of the contents of the gallbladder in response to fat feeding is a vital function of its musculature and is independent of mechanical factors. General conditions influencing smooth muscle tonus must be considered in interpreting the motor phase of any cholecystographic series.

BOOK REVIEWS AND ABSTRACTS

Mark S. Dougherty, M. D.

Department Editor

Diabetes, Its Treatment by Insulin and Diet. A Handbook for the Patient by Orlando H. Petty, A.M., M.D., F.A.C.P., Professor of Diseases of Metabolism, Graduate School of Medicine, University of Pennsylvania; Physician in Charge of Departments of Diseases of Metabolism, Hospitals of the Graduate School of Medicine, University of Pennsylvania, and Philadelphia General Hospital; Consultant in Diseases of Nutrition and Metabolism, Shriners' Hospitals for Crippled Children, Philadelphia Unit. With an Introductory Foreword by John B. Deaver, M.D. Fourth revised and enlarged edition, F. A. Davis, Company, Philadelphia, 1928. "In no way intended as a substitute for the physician, this little volume is of real value to the patient in that it defines Diabetes, gives the causes, suggests methods of prevention, and outlines in detail the diet to be followed, to the end that comfort and efficiency be not disturbed."

This book should be of great value to the physician treating diabetic cases in introducing the subject to his patients. From it they can gain a practical knowledge of their condition which is indispensable in subsequent self-management.

E. A. BANCER, M.D.

"Schizophrenia (Dementia Praecox): An Investigation by the Association for Research in Nervous and Mental Diseases." Published by Paul B. Hoeber, Inc. April, 1928. \$7.50.

This splendid work merits the study of all physicians, because it not only summarizes the modern conceptions of schizophrenia, but reveals the modern approach to disturbances of the personality, which no physician can afford to neglect. In the first chapter, Adolf Meyer discusses the evolution of the dementia praecox concept. The old idea of a disease entity with common cause, course and outcome is abandoned. The present attitude is non-dogmatic, with a "formulation" in which reaction types, the factors entering into them, the prognosis and therapeutic assets are given equal and relatively independent consideration. This "formulation" demands study of specific developments and the factors entering into them, instead of a nosological diagnosis with unitary treatment and a fatalistic presumption of an obligatory terminal state. This conception is emphasized further in the second chapter by C. M. Campbell. He states that the deterioration does not imply a tissue change or intoxication, but may also be produced through limitations of the personality and stresses of life. In this disorder, subjective methods of thought predominate (instead of realistic methods leading

to productive activity and adaptation through modification of the environment) leading to a lack of interest in the external world. This is a more primitive method of thought and adaptation. The disorder may be temporary, and readjustment may be possible. The behavior of the dementia praecox is thus a regression from a higher adaptive type to an inco-ordinate assertion of primitive impulses, inappropriate, with lack of adaptation to the external world. The individual becomes dominated by fantasies and hallucinations. It must always be considered as a reaction of a specific individual in a specific environment, and not a disease process. The prognosis depends on the assets of the individual and the demands of the environment. In the third chapter, Brill discusses the concept of splitting of the mental process. In the fourth chapter, H. M. Pollock gives some interesting statistics; the disorder predominates in males and is of earlier onset in males than in females. It is more common in cities than in rural districts; it is more common in foreign born than native born, and more common in Negroes than in the white race.

The fifth chapter by A. M. Barrett, shows the importance of heredity in this disorder. Hereditary tainting occurred in 78%; this is much larger than in the non-psychotic and less than in cases of manic-depressive psychosis. Psychosis were three times as common in the antecedents than in the non-psychotic. Abnormal character in the antecedents was by far the most common taint, and occurred twice as often as in manic-depressive psychosis. The tainting was greatest in the indirect lines, as uncles and aunts, and less often in the parents than in any other psychosis. The hereditary factors seem to behave as a Mendelian recessive. Myerson, in the sixth chapter, shows the independence of dementia praecox and feeble-mindedness in heredity. Raphael and others in the seventh chapter report extensive observations regarding the body-habitus in this disorder, and in general confirm Kretschmer's hypothesis. In the eighth chapter, G. M. Amsden describes the personality in the various types of the disorder. H. S. Sullivan in the ninth chapter discusses the affective factors in the disorder, and in the tenth chapter, R. H. Hutchings considers the precipitating psychogenic factors. In the eleventh chapter, H. M. Adler reports that the body-habitus of a large group of prisoners closely simulate that found in schizophrenia. M. S. Gregory in the twelfth chapter shows that alcoholism has no relation to schizophrenia. A very important contribution is made by K. A. Menninger in the thirteenth chapter on the

relation of acute and chronic infectious diseases to schizophrenia. He shows that such disturbances can release a psychic regression. This theme is carried further in the following chapter by Jelliffe on the relation of epidemic encephalitis to schizophrenia. He states that psychic or symbolic stimuli can operate over the same paths as a material or toxic stimulus. The body must be considered a unit and it is not always evident whether somatic or psychic processes are paramount—there is a mutual inter-relationship here often difficult to unravel. He shows the importance of psychogenic factors even in encephalitis, and points out the value of a psycho-analytic approach. In the following five chapters are reported some endocrine and bio chemical studies, disturbances of gastrointestinal motility, psychogalvanic reactions and observations on the weight of the heart in this disorder. Wm. A. White discusses the language and thought processes in schizophrenia and concludes that there is a regression to a more primitive type in dementia præcox. N. C. Lewis describes the art of the schizophrenic and shows that it can be interpreted much like dreams. Pathological studies of the brain and endocrine organs are reported in the following three chapters. No specific changes have been found. The prognosis is considered in detail by E. A. Strecker, and the last chapter is devoted to the treatment by S. W. Hamilton. The book is a most important contribution to the psychiatric literature.

W. A. SMITH, M.D.

The Peaks of Medical History. An outline of the evolution of medicine for the use of medical students and practitioners. By Charles L. Dana, A.M., M.D., LL.D., Professor of Nervous Diseases, Cornell University Medical College, Ex-President of the New York Academy of Medicine. Second Edition, Paul B. Hoeber, Inc., New York, 1928. For a comprehensive survey of the history of medicine with attention only to important phases we recommend this book by Doctor Dana. In its one hundred pages the author has covered in clearly defined periods the entire scope of medical history from the dawn of history itself to the era of modern medicine. To each period he devotes one chapter, as follows: 1. Introduction, or the Pre-Hippocratic Period; 2. The Hippocratic Period; 3. The Alexandrian School; 4. Galen and the Post-Galenic Period; 5. The Renaissance of Medicine; 6. The Period of Harvey, Physiology and Research; 7. The Period of Jenner and Modern Medicine. In addition he includes a diagrammatic outline of the six peaks of medical history, 43 full-page plates and 16 text illustrations, and a well selected bibliography of the more entertaining treatises on medical history. These, in themselves, make the book a valuable asset to any library.

E. A. BANCKER, M.D.

BOOKS RECEIVED

The Heart in Modern Practice, Diagnosis and Treatment by William Duncan Reid, M.D., Assistant Professor of Cardiology, Boston University School of Medicine; Associate in Cardiology of the Evans Memorial Hospital; Formerly Chief of Heart Clinic at the Boston Dispensary, Junior Assistant Visiting Physician and member of the Heart Service at the Boston City Hospital; Assistant Visiting Physician to out-patients at the Massachusetts General Hospital. The large amount of new knowledge pertaining to affections of the heart has compelled the insertion of much material in the second edition of this book. As far as practical, the original intention of brevity with clarity has been adhered to, save in the matter of cardiac arrhythmias. Contains 466 pages with 81 illustrations. Second edition revised and enlarged. Publishers: J. B. Lippincott Company, West Washington Square, Philadelphia.

Compilation of Diets. California State Dietetic Association. Elizabeth Hayward, 2826 South Hope St., Los Angeles, 1927; 70 pp., leather binding. Price, \$5.00. The Compilation of Diets by the California State Dietetic Association is a very convenient and practical manual. It contains diet lists besides many useful recipes for all conditions treated by dietetics. The book is put up in a form for ready reference. There are many things that can be conveniently found there that would consume considerable time in searching through the larger and more comprehensive books on dietetics. Its great value to the busy doctor lies in this fact that he can so readily turn to it and find just what he wants. It is revised yearly by the California State Dietetic Association and being in a loose leaf form can be kept up-to-date. This gives the manual an added value in keeping one from falling behind in this important line of treatment. I find it a great help to me and recommend it to all those interested in the practice of medicine.

PAUL B. ROEN, M.D.,
Hollywood, Calif.

COMMUNICATIONS

Dr. G. Y. Moore
Cuthbert, Georgia

Dear Dr. Moore:

Received your letter of July 10th and appreciate your interest. Am glad to advise that I joined the Sumter County Medical Society at its last meeting which was held recently at Americus. Shall be very glad to have you stop to see me any time you are passing through Smithville.

Respectfully yours,

H. M. TOLLESON, M.D.
Smithville, July 12, 1928.

MALTA FEVER

To the Editor:

I promised to give you a further report on a case of Malta Fever which I have under treatment, and I am quite pleased to submit the following:

The autogenous vaccines were received from the Laboratory of the State Board of Health on June 30th, when this patient was just beginning his third period of remission. I gave him an initial dose of 250 million organisms and rapidly increased the dose, giving them every other day, until the sixth dose on July 10th contained 1000 million organisms. This dose I repeated on July 13th and on the 17th.

His reactions have been very mild except for the dose of 500 million given on July 4th, when his temperature rose to 102 $\frac{2}{5}$. This dose was repeated on July 6th following which his temperature went to 100, dropping in a few hours to 97 $\frac{4}{5}$. Since this date his temperature has ranged from 97 to 98 $\frac{4}{5}$.

I am not sure that the rise on July 4th was not partly due to an effort on the part of the disease to pass into a fourth fever phase, as one was about due on that date.

This patient is now rapidly gaining in strength and weight. He has a voracious appetite, no cough, and his liver and spleen are only slightly enlarged.

Considering the history of Malta Fever it would now seem that the autogenous vaccines have effected a complete cure in this case.

B. S. GOSTIN, M.D.

Macon, Ga., July 22, 1928.

DELEGATES TO AMERICAN MEDICAL ASSOCIATION

Dr. A. H. Bunce, Secretary,
Medical Association of Georgia,
Atlanta, Ga.

Dear Doctor Bunce:

At the annual session of the American Medical Association held in Minneapolis, June 11 to 15, 1928, a triennial reapportionment of delegates from constituent states and territorial medical associations was effected.

The reapportionment of delegates was on the basis of one delegate for each 775 members or fraction thereof for all constituent associations having a recorded membership of 775 or more. Each constituent association with smaller membership is entitled to one delegate.

The records of this Association show that on April 1, 1928, the membership of the Medical Association of Georgia was 1,771. The Medical Association of Georgia will be entitled to three delegates in the House of Delegates of the American Medical Association for 1929, 1930 and 1931.

Very truly yours,

OLIN WEST, M.D., Secretary.

Chicago, August 13, 1928.

Macon, Ga., August 9, 1928.

Dr. Allen H. Bunce,
Secretary, Medical Association of Georgia,
Atlanta, Ga.

Dear Doctor Bunce:

In reporting the proceedings of the annual meeting held in Savannah, in the July issue of the Journal, no mention is given by the Committee on Necrology of the deaths of two prominent Macon physicians, Doctors William J. Little and N. T. Carswell. In view of your remarks as quoted prior to the adoption of the committee's report it would seem that this report ought to be corrected. I am sure that both of these doctors were paid up members of our local County Society, therefore, of the State Association. I am sure, however, that you did not intend to do these doctors or their families an injustice but believe the correction of the report and remarks would be appreciated.

Yours fraternally,

JOHN M. SIGMAN, M.D.

August 11, 1928.

Dr. John M. Sigman,
Georgia Casualty Bldg.,
Macon, Ga.

Dear Doctor Sigman:

Your favor of the 9th received. Notice of the death of Dr. Wm. J. Little was published in the April issue of the Journal and his name should have been included in the list of deceased members. Dr. N. T. Carswell died, according to our records, on May 1, and notice of his death was published in the June issue of the Journal and will be included in the list of deceased members next May. Glad that you called our attention to the names of these prominent physicians and members of the Association.

ALLEN H. BUNCE, M.D.

NOTE: We will appreciate it very much if other members of the Association will notify us of any further omissions from the list of deceased members.

The remarks which I made after the report of the Committee on Necrology was read were purely explanatory, and were not intended as a reflection on any member, past or present, of the Association, or their families.

We exert every effort to keep our records correct and up-to-date, but in spite of all our efforts, some errors seem to be unavoidable.

We wish to take this opportunity to thank Doctor Sigman and all others who so kindly help us to keep the records straight.

A. H. B.

To the Editor:

Today as the wind roared and the rain pattered, I sat and thought of doctors and weather when we were boys, and marveled at their faithfulness to duty despite the rain, cold, and mud. Particularly since they prided themselves on relieving pain and suffering without sending a bill, knowing that the

voluntary payments would be insufficient in many instances to care for their families when they were gone.

Here my eye noted a record system, a day book, and monthly statements, but I was not ashamed, because rapid progress and necessary equipment has changed customs. We are now business men as well as physicians. The public understands and appreciates. Perhaps some sympathy has been replaced by science and doubtless to public good. However, the change has its advantages to all concerned. Admitting business rules then does not lower the high standard, but signifies advancement.

J. A. REDFEARN, M.D.

Albany, Ga.

NEWS ITEMS

Dr. I. E. Aaron, Lyons, was host to Dr. B. H. Clifton, Atlanta; Drs. J. K. Hall, W. W. Odom and H. D. Youmans of Lyons, at luncheon on June 27.

Dr. Colquitt Pearson, formerly of Kelsey City, Florida, has opened offices in Jesup for the practice of medicine. He is a graduate of Emory University School of Medicine.

The members of the adjunct faculty of the Medical Department of the University of Georgia met on August 7th, 1928 and organized the Adjunct Faculty Association, electing the following officers: Chairman, Dr. Andrew A. Walden; Vice-Chairman, Dr. William J. Cranston; Secretary, Dr. Peter B. Wright. At this meeting Dr. S. J. Lewis was elected to represent the adjunct faculty on the Executive Committee of the Medical Department of the University of Georgia. Dr. Lewis H. Wright and Dr. John C. Wright were elected to represent the adjunct faculty on the Hospital Board of the University Hospital. These elections were in response to the Dean's desire that the adjunct faculty be represented on the committees referred to.

Dr. Shelley C. Davis announces the opening of his office and association with his father, Dr. E. C. Davis, at Davis-Fischer Sanatorium, 35 Linden Avenue, N.E., Atlanta.

The round table discussion of the medical staff of The Good Samaritan Clinic was held at the Clinic, 63 North Avenue, N.W., Atlanta, July 18.

The Second District Medical Society held its summer meeting at Indian Springs, July 11. The following physicians were on the program: Dr. J. M. Sigman, Macon, read a paper entitled Tinea Dermatitis; Dr. G. Y. Massenburg, Macon, Radical Treatment of Carbuncles; Dr. W. C. Humphries, Griffin, Our Tuberculosis Problem; Dr. A. H. Frye, Griffin, Co-existing and Tubal Pregnancy; Dr. A. G. Fort, Atlanta, Treatment of Chronic Purulent Otitis Media with Zinc Ioniza-

tion; Dr. H. W. Copeland, Griffin, New Type of Gastrostomy for Carcinoma of Oesophagus with Case Reports; Dr. W. C. Pempelley, Macon, Indigestion, Its Relation to Gall Bladder Disease.

The Royal College of Physicians of London arranged recently for the three hundredth anniversary of the publication of the discovery of the circulation of the blood as announced by Dr. William Harvey in his famous Scientific Classic. Delegates, representing universities and medical societies throughout the world, convened in London for the purpose of commemorating the anniversary.

Dr. W. H. Hadaway, LaGrange, and Dr. R. M. Avery, have opened offices at 200 Church Street, LaGrange, and will be associated in the practice of medicine. Dr. Avery has spent several years in the hospitals of Mobile, Alabama, and New Orleans, Louisiana, studying diseases of the eye, ear, nose and throat.

Dr. D. W. Pritchett, Barnesville, has opened offices at Thomaston and will devote part of his time at the latter location treating diseases of the eye, ear, nose and throat.

Dr. J. R. McGibony, formerly of Augusta, removed to Greensboro and is associated with Dr. Goodwin Gheesling in the practice of Medicine.

Dr. H. D. Smith, Macon, formerly house physician for the Macon Hospital, is in New York taking a post-graduate course in diseases of the eye, ear, nose and throat. Dr. Wm. H. Baxley, formerly of Hephzibah, succeeds Dr. Smith at the Macon Hospital.

Dr. J. L. McGhee, head of Emory University School of Medicine biochemical research laboratories, delivered an address before representatives of more than one hundred textile mills at the Atlanta Biltmore Hotel, Atlanta, on July 24. He stated that an intensive campaign would soon be launched with a view toward discovering the causes of anæmia among industrial workers of the state. The entire resources of Emory laboratories will be utilized in this important work. Dr. George T. Lewis of Emory University, a pioneer in the field of anæmia research, will assist in the work.

Dr. S. J. Hall, assistant surgeon United States Public Health Service, formerly at the Marine Hospital at Baltimore, has been assigned to duty at the Marine hospital, Savannah.

Dr. J. H. York, formerly a staff physician at Grady Hospital, Atlanta, has been appointed resident surgeon to succeed Dr. George H. Cochran, who resigned.

Dr. William O. Martin, Jr., announces the opening of his office at 478 Peachtree Street, Atlanta. Practice limited to ophthalmology.

Dr. J. E. Morrison, Savannah, has been appointed Associate Medical Officer at the United States Veterans' Hospital, Memphis, Tennessee.

Dr. W. C. Tipton, Sylvester, has completed a course in field training for public health work at Indianola, Mississippi, and accepted the position of health officer for Worth County.

Dr. B. Russell Burke announces his association with Dr. Herschel C. Crawford, offices in the Doctors Building, 478 Peachtree Street, Atlanta. Practice limited to diseases of the eye, ear, nose and throat.

Dr. Gerald Peacock, formerly of Birmingham, Alabama, has moved to Thomaston and will use the offices formerly occupied by Dr. R. A. Verdier.

The DeKalb County Medical Society was host to the members of the Fifth District Medical Society on August 3. Dinner was served at the Candler Hotel, Decatur.

Dr. N. M. Owensby, Atlanta, addressed the board of commissioners of Fulton County at a recent meeting and suggested that they establish a Psychiatric Hospital for the treatment of mental diseases believed to be curable. He stated that we treat our insane like criminals, if they happen to be poor, by subjecting them to ten days' confinement in jail, as required by law before the lunacy board passes on their eligibility for the asylum at Milledgeville.

Dr. Hugh F. Wilson, formerly of Durham, North Carolina, has moved to Naylor and will continue the practice of medicine in that vicinity.

For information in reference to an excellent location for a physician in one of the best agricultural sections of Georgia, please write the Journal.

MARRIAGES

Dr. Guy J. Dillard, Columbus, and Miss Estelle Jesup were married June 29, 1928.

OBITUARY

Dr. Ujanirtus R. Allen, LaGrange, University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, Maryland, 1882; aged 67; died July 9, after a lingering illness. He was born at Houston, Troup County, Georgia, and had practiced medicine in his home community for more than forty-five years. Dr. Allen was a member of the Troup County Democratic Executive Committee for a number of years and had many friends over the state as well as in his home county. Surviving him are two half sisters, Mrs. Exa Brittain, LaGrange, and Mrs. C. H. Dasher, Mosely; two half brothers, J. W. Strickland, LaGrange, and W. H. Strickland, Richland. Funeral services were conducted by Dr. J. E. Ellis, pastor of the First Methodist Church, and Rev. G. L. Chastain, pastor of the St. John's Methodist

Church. Interment was in Hillview Annex Cemetery at LaGrange.

Dr. Noel McHenry Moore, Augusta, University of Georgia Medical Department, Augusta, 1898; aged 55; died at his home on Kings Way, June 25. He was reared in Augusta and had practiced medicine there for nearly thirty years. Dr. Moore was professor of Pediatrics at the University of Georgia Medical Department. He was a member of the Reid Memorial Presbyterian Church and was deeply interested in the religious life of Augusta. Funeral services were conducted by Rev. S. L. McCarty and interment in Summerville Cemetery.

Dr. Eugene L. Daniel, member, Atlanta, Eclectic Medical College, Cincinnati, Ohio, 1913; aged 43; died, July 4, at a private hospital. Surviving him are his widow, one daughter, Miss Alpha Greene Daniel; three sons, Eugene, Jr.; Albert G.; and William R. Daniel; one sister, Mrs. Edgar L. Bridges. Funeral services were conducted from the residence at 230 Howard Street, Atlanta, by Rev. L. J. Jackson. Interment was in West View Cemetery.

Dr. Ira E. Aaron, member, Lyons, Southern Medical College, Atlanta, 1894; aged 57; died July 20, at his home of ptomaine poisoning. He moved to Lyons after graduating from the medical college. Dr. Aaron was local surgeon for the Seaboard Air Line Railroad for a number of years. He was a devout christian and spent a great deal of time in public work.

Dr. James Wyly Crawford, Cornelia; Vanderbilt University School of Medicine, Nashville, Tennessee, 1902; aged 56; died July 20, of hemorrhage. He was born in Hayesville, North Carolina, and attended the common schools in his home village, later he was a student at the University of Chattanooga. Dr. Crawford moved to Cornelia in 1904 and built up an extensive practice. He was local surgeon for the Southern Railway and for the Georgia Power Company during the construction of the Tallulah Falls development. Dr. Crawford was known for his generous and sympathetic qualities and did a large amount of charity practice. Surviving him are his father, four brothers, three sisters and six sons. Funeral services were conducted by Rev. J. O. Fullbright from the First Baptist Church and interment in Level Grove Cemetery.

PROCEEDINGS OF THE HOUSE OF DELEGATES OF THE MEDICAL ASSOCIATION OF GEORGIA

(Continued from page 371)

On motion regularly seconded and carried this report was adopted as read.

REPORT OF COUNCIL

The Secretary: The Council, as your Fi-

nance Committee, recommend the following appropriations:

To the Committee on Public Policy and Legislation, \$500.00, or as much thereof as necessary.

To the Committee on Medical Defense, \$3,500.00, or as much thereof as the Committee finds necessary to use.

To the Committee on Constitution and By-Laws, sufficient funds to cover printing of the Constitution and By-Laws as revised, so that every member may have a copy.

They also recommend that the expenses of our invited guest, Dr. Clifford G. Grulee of Chicago, amounting to \$125.00, be paid.

On motion regularly seconded and carried this report was adopted as read.

NEW BUSINESS

Dr. W. F. Reavis: Just a word in regard to a local measure that will come up at our September meeting. In our County we are trying to put over a bond issue for hospitals. When this comes up in the election we hope that the men in the other districts of the State will remember this. We feel that if you will give us your support we will have no trouble in having this amendment passed as a State issue. We will certainly thank you for your assistance.

The President: The House will receive this as information, and thank Dr. Reavis. Is there any further new business?

Dr. C. W. Roberts: I would like to present the following resolution:

Whereas, the Medical Association of Georgia in annual session has been the guest of the Georgia Medical Society, and the delightful citizens of Savannah, and that

Whereas, we have been the recipients of many courtesies so characteristic of this charming city, its big-hearted medical people, and its alert citizenship, and

Whereas, the unaffected environment long existent in this city of blessed historic and civic renown, coupled with a program of unusual interest, has made it possible for us to enjoy one of the most successful reunions in the history of our Association; therefore, be it

Resolved: That we express our feeling of deep gratitude, first, to the organized medical profession of this community; then to all the people of Savannah, as well as to the press and to such other organizations as have so generously contributed to our happiness and the onward-going of our beloved Association. And be it further

Resolved: That we record our appreciation of the unique playlet given through the Ladies' Auxiliary of the Chatham County Society, as well as for the splendid scientific and commercial exhibits, which have enriched

the educational value of our session. Also, to the Estes Surgical Instrument Company for the compliment conferred in furnishing equipment necessary for the examination of applicants for physical rating under the plan fostered by the Committee on Health and Public Instruction. And be it further

Resolved: That the thanks of this Association be expressed to the management of the Hotel De Soto for its excellent services, which have contributed so much to our comfort.

Respectfully submitted,

FRANK K. BOLAND,
C. W. ROBERTS.

Dr. Thrash moved that this resolution be adopted.

Motion seconded and unanimously carried.

NOMINATION OF COUNCILORS

The following gentlemen were nominated as Councilors for their respective Districts:

Fifth District: Dr. E. C. Thrash, Atlanta.

Sixth District: Dr. M. M. Head, Zebulon.

Eighth District: Dr. H. M. Fullilove, Athens.

The Secretary: Since we have received no recommendation from the Seventh District the man now in office, Dr. M. M. McCord of Rome, holds over until a successor is elected or appointed. Under our new Constitution and By-Laws we will place the nominations before the General Assembly for action.

Dr. C. F. Holton: I move that the Secretary and the President be authorized to act for the House of Delegates on any nomination received, for the Seventh District.

Motion seconded and carried.

The Secretary: I move that we adopt the minutes of our proceedings of this morning.

Motion seconded and unanimously carried.

The President: Is there any further business to come before the House? If not, I will entertain a motion to adjourn.

On motion of Dr. Head, seconded by Dr. Toepel, the House of Delegates adjourned at 9:10 a.m., *sine die*.

ALLEN H. BUNCE,
Secretary.

GEORGIA TUBERCULOSIS ASSOCIATION

PHYSICAL EXAMINATION IN THE DIAGNOSIS OF TUBERCULOSIS

(Continued from page 374)

over which it is heard and means infiltration or exudation or both. The size of the rale depends on the size of the air passage and the amount of moisture present during the passage of air through it. If a rale has a squeaky sound the air passage is extremely small and the moisture minimal. If the rale has a bub-

bling sound the air passage is fairly large and the moisture plentiful.

The rales of early tuberculosis are seldom heard during quiet, easy breathing, frequently not after increased or forced breathing and often not after coughing, unless the cough occurs just at the end of expiration followed immediately by an inspiration. It is during the early phase of this inspiration that the typical rale of tuberculosis usually occurs. Such rales occur in showers, are constant, and most often have a crackling sound. One must be sure that there is nothing in the upper respiratory tract from which sounds simulating rales are frequently transmitted through the chest to the stethoscope. Rales in common with all abnormal physical findings are practically always found in the upper chest, in the supraspinous fossa and interseapular spaces to the level of the fourth or fifth dorsal vertebra, and above and below the clavicles to the second intercostal space. It is a good rule to suspect tuberculosis in every abnormal condition in the upper chest and to hold abnormal findings in the lower chest as not tuberculous until definitely proved. The physical examination of the anterior chest is carried on in the same way as that described above for the posterior chest.

It is well to bear in mind that repeated physical examinations are often necessary to make a positive diagnosis.

THE IMPORTANCE OF EYE EXAMINATIONS IN THE DIAGNOSIS OF INTRACRANIAL LESIONS

(Continued from page 385)

As to the question of early choking of the discs, it is very difficult to determine at times whether there is early choking or an early papillitis, which is an inflammatory affair. It is unfortunate that the English have used the term "neuroretinitis" and "papillitis" when referring to choked disc. Choked disc is a purely mechanical affair, whereas the other condition is an inflammatory process.

I am glad something was said about the frequent absence of the outspoken symptoms of increased intracranial pressure in brain tumor. There are sometimes no abnormal ocular findings, and no disturbance of eyesight. The choked disc is caused either by an interference of the normal cerebral fluid passing from the ventricles to the subarachnoid space,

or by a tumor which is so large as to materially compress the brain.

If we continue to wait for the so-called "cardinal symptoms" of increased intracranial pressure for the diagnosis of brain tumor, we will wait too long in many cases. In the study of this series of 100 cases it was astounding to note that twenty-seven and a half months was the average time that elapsed from the onset of the symptoms that should have suggested an intracranial tumor before the diagnosis was made. It is most important to keep in mind the manifestations other than the cardinal symptoms if we wish to lower the time that elapses between the onset of symptoms and the diagnosis.

THE FALL MEMBERSHIP DRIVE

We have nearly three thousand physicians in Georgia and of these considerably over two thousand are eligible for membership in the Medical Association of Georgia. Our President, Dr. C. K. Sharp of Arlington, has set two thousand as the goal for his administration. It can be reached if he receives the support of every member. For the first time in the history of our Association we have one 100% District—the Third under the able leadership of the Councilor, Dr. G. Y. Moore of Cuthbert. We have more 100% County Societies than at any previous time, however, we have fewer paid-up members now than last year at this time. No report has yet been received from several County Societies and a number of others are far short of their usual membership. In other words, our membership is somewhat "spotted"—very good and very bad. A strong Fall Membership Drive by all officers and members of constituent societies should make the entire state look "very good."

ELBERT COUNTY ADDED TO THE HONOR ROLL

We are pleased to announce that Elbert County is 100%, having every physician in the county who is eligible, a member, in good standing, of the Association.

Dr. B. B. Mattox, the efficient Secretary-Treasurer, sent in his report, together with cashier's check, for all members on March 1, but we overlooked placing his county on the Honor Roll, where it should have been from

that date. We are indebted to Dr. A. S. Johnson of Elberton, and other members of the Society, for calling our attention to this omission.

With the continued efforts of the officers and members, we hope to add many more 100% counties between now and the end of the year.

SKIN ERUPTIONS WITH PHENOBARBITAL (LUMINAL)

The three cases reported by William C. Menninger, Topeka, Kan. (Journal A. M. A., July 7, 1928), are the only cases in which the skin rash appeared in approximately 400 cases in which phenobarbital has been used. From the data at hand, no relationship can be drawn between the amount of the drug and the weight of the patient. Phenobarbital may produce an urticarial reaction, or it may produce a scarlatina-like or morbilliform maculopapular erythema. In approximately 50 per cent of the reported cases of the latter condition there has been an associated pyrexia and other systemic toxic symptoms. In the face of the widespread usage of the drug, the number of cases showing such a toxic reaction must represent a very small percentage. A distinction should be made between the toxic reaction and the poison reaction. In the former, many of the cases do not show any particular relation to the dosage of the drug, and skin reactions have appeared frequently on small doses. It seems to Menninger that the cause must be a selective tissue reaction to the drug, dependent on constitutional factors about which we are still ignorant.

LOCATION WANTED

Reputable young physician with experience in hospital work and general practice wants desirable location in country town to do general practice. Address "B," care Journal.

WANTED

Laboratory and x-ray technician, two years' experience, desires position in clinical or hospital laboratory, or in public health work. Special training at hospital and medical school in hematology, serology, bacteriology, nasal metabolism and tissue work; also in x-ray technique, therapy and developing. College graduate. A-1 reference. "W. A.," Journal.

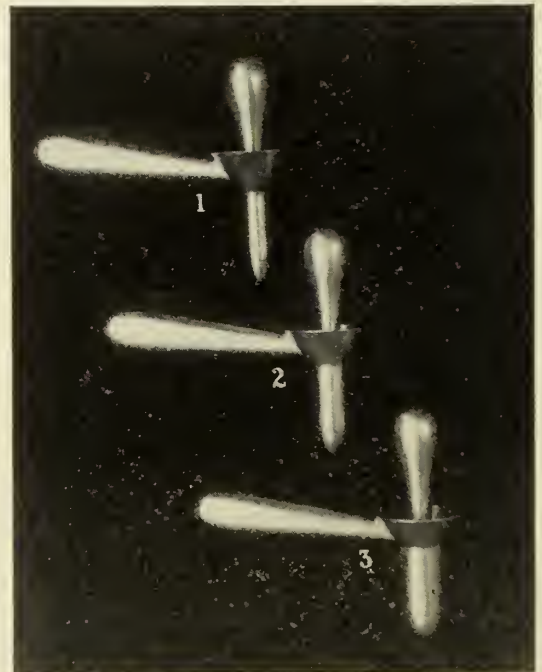
WANTED

Laboratory Technician wants position; doctor's office preferred. Can do all routine laboratory work, including blood chemistry, Wassermann, tissue and bacteriology.

R. C., Box 166, Rochmart, Ga.

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No. 9

SURGICAL DISEASES*

Clinic

FRANK K. BOLAND, M.D.,

Atlanta

I am indebted to Drs. Barrow, Holton and Egan for the privilege of showing these cases. My idea of these clinics is that they should be held entirely by local men. In the past it has been our custom not to give the local men a place on the program, but we thought that the clinics could best be given by local men, as they would be more familiar with the cases. However, the committee saw fit to invite two or three men outside of Savannah.

Case I: Bilithorax, ruptured gallbladder and diaphragm.

This patient, N. S., colored, aged 24, in February, 1926, fell from a box car, striking his abdomen on a steel rail. He was unconscious for several minutes and was carried to his quarters where he remained for about three weeks and then went to Savannah. On the day after his fall he complained of pain in the *left* side of his chest, and noticed a slight swelling in his abdomen, which became progressively larger.

On admission to the hospital he appeared to be very ill, and physical examination revealed absolute flatness of the right chest, with the heart pushed far over to the left. The abdomen presented a circumscribed, soft, fluctuating tumor over the epigastrium, which was about the size of a cantaloupe. The chest was aspirated and found to contain bile. The feces were grayish and examination revealed no bile in them. The abdomen was opened and a large quantity of bile poured out, which came through the diaphragm from the chest. A few days later

the chest was drained through a small tube inserted through the ribs. Later a frank empyema developed, a rib was resected and a large amount of fibrin and pus was evacuated. The lung at this time was completely collapsed. The patient was given lung exercises, such as blowing into a bottle, and six months later was discharged greatly improved. The lung has now fully expanded, except where it is fastened at the base to the diaphragm with adhesions. One month ago a ventral hernia from the original drainage operation was repaired by operation under novocain. The patient is now fully recovered, and able to do hard work. His Wassermann reaction is 4+, and he has been given arsphenamin but develops a dermatitis when too much medication is employed. He has been on the mercurials and iodide of potash. After the drainage tube was inserted in the chest Dakin's solution was used for irrigation purposes, and the solution entering the chest poured out through the abdomen.

Dr. Drane will show you the x-ray films of the case, and as you can see (presenting patient) the man is in good condition at present. Dr. Holton is to be congratulated on the remarkable success he had in the treatment of this case.

Of course, the point comes up as to the origin of the bile. The idea was that it came from the liver, but such an amount of bile could not have come from that source. The fact that the bile was thick and viscid shows that it came from the gallbladder rather than the liver for, as you know, the bile before it reaches the gallbladder is thin but after leaving the gallbladder is thick. The fall from the box car must have ruptured the gallbladder and some of the bile escaped into the pleural and the peritoneal cavities. The opening in the gallbladder must have become sealed in some way to the abdominal wall.

*Informal Clinic before the Medical Association of Georgia, Savannah, Ga., May 9, 1928.

Dr. Holton had only to go through the skin before the bile came out. There was very little bleeding in the case and the patient is very fortunate in the excellent result which has been obtained.

Case II: Cholangitis.

This white man, aged 43, for the past 20 years has complained of irregular attacks of pain in the upper right abdomen, the pain being severe, abrupt and knife-like in character, and referred to the angle of the right scapula. The attacks were not accompanied by nausea and vomiting, but were preceded by a sluggish sensation and usually required morphia for relief. He has been constipated, and has always belched much gas. The attacks occurred as often as twice a week and recently have been increasing in severity, lasting for several hours. Following the attacks his abdomen has been sore and tender for several days.

He gives a history of having had smallpox, and thirty years ago he had typhoid fever. His abdomen has always been tender, especially in the upper right quadrant. At the height of the attacks he became jaundiced, sometimes mildly, sometimes severely, the jaundice gradually disappearing.

His blood pressure is 150 systolic, 95 diastolic. His heart is normal, as are the other physical findings. X-ray examination of the gall-bladder reveals findings which are very suspicious of stones; the gastrointestinal films are negative.

He was operated upon about three weeks ago. The gall-bladder was found to be normal, but the biliary tract, the cystic duct and common duct seemed to be thickened, with some adhesions. The entire tract was exposed, down to the duodenum. A calcified mass was found, and another mass near the ampulla of Vater was thought at first to be a stone, but it was impossible to demonstrate this although the duct was explored from one end to the other. The appendix was removed, and cholecystostomy was performed. I congratulate Dr. Holton on not doing a cholecystectomy in this case. Apparently there is some recurrent obstruction in the common duct from some cause or another, possibly a chronic pancreatitis, and the day

may come when the patient may need an anastomosis between the gall-bladder and duodenum or stomach. In cases where the gall-bladder has been removed in such conditions the patient is in a bad fix.

Another curious feature about this case has appeared since the operation. The patient has developed anginal attacks in the left side. The heart is normal, the blood pressure is normal, and the Wassermann reaction is negative. He has had two or three attacks of angina that have been so severe that morphia was required for relief. I have seen some cases of pseudo-angina relieved by cholecystectomy but this man developed this symptom following the operation.

Cultures from the gallbladder showed the colon bacillus and the typhoid bacillus. This reminds me of the classical case of Dr. Barker, in which the patient had typhoid fever when a young man and thirty-five years later had the gall-bladder removed, and in the stones from the gallbladder the typhoid bacillus was grown in pure culture. This looked like cause and effect, and bears out the relation of typhoid fever to gallbladder disease.

Case III: Nonunion following fracture of right tibia and fibula.

This fifteen-year-old boy broke both bones of his right leg at the lower third ten years ago. Some time later an operation was performed "to remove excessive callus formation." Following this operation there was nonunion, which has persisted. The leg has never developed and, as you can see, is five inches short. For several years he got about by crawling on his knees, and only recently has used crutches. We believe that the bones did not develop because of disuse, but following much consultation it was decided that nothing can be done except an amputation of the upper third of the leg. The Wassermann reaction is negative.

ETIOLOGY AND TREATMENT OF PITYRIASIS ROSEA

H. H. Hazen, Washington, D. C. (*Journal A. M. A.*, Sept. 1, 1928), concludes that pityriasis rosea is probably due to an infection entering through either the tonsils or the other lymphoid structures of the throat. By use of the ultraviolet ray, much time can be saved in the treatment of the disease.

CANCER OF THE BREAST*

Clinic

C. C. HARROLD, M.D.,

Macon

I have some pictures, but no patients to show you. Approximately 2,500 years ago the Judean Prophet of the Exile found that when he wished to emphasize a certain definite lesson to his hearers the lesson was more easily driven home if he could illustrate it with various physical items which his hearers could see rather than merely reconstruct through hearing him speak. It seems a far cry back to those distant days, but I am approaching my subject even as the turkey approaches her nest, sideways from behind.

It is impossible, for reasons over which I have no possible control, for me to present for your inspection the subject about which I wish to talk. So even as Ezekiel was compelled to reconstruct a miniature Jerusalem to lay siege to, so I must try to show you some model to illustrate the end-results in the two cases I wish to report. The only models which will, I think, in any way make you fully see the lesson I wish to emphasize are photographs and engravings, and I will therefore ask that these may be passed around for your inspection. (Two photographs of coffins were then shown.)

Case I: Mrs. X. Y., aged 34, was referred to me by a physician from a neighboring county, with the statement that she had what he considered a moderately advanced cancer of the breast. At that time she was a school teacher, living apart from her husband and trying to support a two-year-old child. Without going too deeply into her story she had a well-defined, hard lump about the size of a walnut and almost as hard, in the outer lower quadrant of her left breast. Her history dated back only three or four months and the axillary glands gave no evidence of enlargement. The patient was thin and a radical operation apparently offered her a good chance, as these cases go. The gravity of her condition was fully explained to her and early operation was advised. Un-

fortunately, her county has no hospital and no poor fund, and even so hers was hardly a case for pauper relief. Her husband declined to have her come where she wished to for operative relief, and she was sent to a hospital where she told me later her husband could get very cheap rates. There she was operated upon and I did not see her again until six months later, in January, 1923, when she returned to me for examination. At that time I found a scar five or six inches long over the site of her breast. She informed me that she had had a radical amputation by Dr. X. Y. Z., and that the axillary glands began to enlarge within two or three weeks after her return home. I wrote to this doctor and he replied to me that he had performed a radical Halstead breast operation on this patient. At the time of the second examination the supraclavicular glands were not palpable and x-ray examination of her chest was negative. I therefore told her that I thought there was a possible chance of helping her by cleaning out her axilla. This was done on January 4, 1923, at which time I found both the pectoralis major and pectoralis minor still in their anatomical positions, neither of them having been removed during the so-called radical Halstead breast amputation. Her operative wound healed primarily, and she never developed any skin involvement or further axillary involvement. She did, however, develop metastasis in her left chest, with rapidly recurrent pleuritic effusions, and metastases in her spine, with terrific pain. She lived for nearly two years after her last operation, dying a horrible death, under the most trying circumstances.

Case II: Mrs. D. F., aged 44, the mother of four children, the youngest of whom was eight years old, told a story that was tragic and a most serious reflection upon our fraternity—I might almost say upon our State. Her husband was for twenty years a school teacher, and a most highly educated one. In our system he had found it practically impossible to raise and educate his family upon his salary, and at the age of over fifty had abandoned his calling. For twenty years this patient had noticed a "lump in her

*Informal Clinic before the Medical Association of Georgia, Savannah, Ga., May 9, 1928.

breast" and stated that fully ten doctors had looked at it. She had nursed four children since she first noticed it. Until a few months prior to my seeing her every doctor had advised her that the lump amounted to nothing—although it had been the size of a lime for years—and had told her to do nothing about it unless it started to grow. Start to grow it finally did, and then again she consulted a doctor. This one told her that she had probably waited too long, as it was then definitely cancerous, with very well marked glands in her axilla.

On June 3, 1927, I performed a radical breast amputation for her and at that time there were no palpable glands in her neck. Eight months later she died, with involvement in her neck, with distant cutaneous nodules, and liver involvement.

If all of the 2,000 doctors in Georgia could have heard this woman as she sat in my office two months before her death, when she realized that she had to die and leave her eight-year-old daughter, if all of us could have heard her talk of the ten doctors who had told her for twenty years to leave the benign tumor of her breast alone until it started to grow—if we could have heard her and learned the lesson, then I think that her sacrifice on the altar of medical ignorance would possibly not have been in vain. Unless many of the 2,000 hear the story and heed it, then her sacrifice is absolutely in vain.

I also wish that every doctor in Georgia could and would read the report of the breast amputations for cancer at the New York Hospital, and realize that where the axillary glands are genuinely involved the case is practically hopeless. When I hear a man who is supposed to know about cancers, advise a group of doctors in Georgia to leave benign tumors of the breast alone in women under thirty, and when I continue to see, as I do, every month, women with breast cancer and with axillary involvement on the first day of my examination, I become almost hopelessly discouraged as to the cancer education of our women through the medical profession, and really believe that until

THE SENILE HEART*

Clinic

E. E. MURPHEY, M.D.

Augusta

I am presenting before you two cases that have nothing unusual about them, no abnormality, no unfamiliar disease. Only two cases of senile heart, because I have felt that it is worth while to focus your attention for a few moments on this problem. Whether one be a surgeon or a physician, or in whatever field of medicine one may labor, the time will come when the senile heart will confront one for study; in the patient who cannot take an anesthetic, cannot stand a strain, cannot do this or that—what can he do to stay in the realm of efficiency and "carry on?"

I will not read a history but will ask the patients to tell in their own way the story of their breaking down.

Case I: This gentleman is sixty-two, a veteran of the Spanish-American War. His Wasserman history is negative. His past history is good except for an attack of cardiac insufficiency.

To Patient: Mr. Taylor, how long ago did you notice any trouble with your heart?

Patient: Two years ago.

Dr. Murphey: Did it come on suddenly or gradually?

Patient: I could tell I was not getting along as I should, and I went to the house one afternoon and had my supper and retired early and went to sleep and waked up with a shortness of breath. I jumped up and was perspiring so much that in a few minutes the flannel shirt I had on was as wet as if I had been in a shower bath. My wife telephoned for the Doctor in Macon, and he said my pressure was 283.

Dr. Murphey: We have the history of a man who was carrying on his work as a machinist, who went home after working all day, ate his supper, went to bed and was awakened with sudden choking sensations and urgent dyspnoea, followed by profuse

*Informal Clinic before the Medical Association of Georgia, Savannah, Ga., May 9, 1928.

perspiration. He says he was sent to the hospital, and kept there for a time.

To Patient: Did they bleed you?

Patient: No, not the first time, but I had to go back.

Dr. Murphey: When you came out of the hospital were you given any instructions as to what you should or should not do?

Patient: No, they did not give me any.

Dr. Murphey: How long did you stay at work?

Patient: Two weeks, and then I went back to the hospital.

Dr. Murphey: Then when you went out this second time, did you have any instructions as to what to do?

Patient: No, not at that time.

Dr. Murphey: You were bled that time, did you improve?

Patient: Well, it improved my feelings some, and then I went back to work at my regular occupation.

Dr. Murphey: How long did you last that time?

Patient: Not so very long, it began to come back on me, and then I had trouble for a year.

Dr. Murphey: Then the same series of symptoms recurred and you had to go back to the hospital?

Patient: Yes sir.

Case II: (Presenting patient): This man is also sixty-two years of age, and has been a steward on a boat.

To Patient: How long have you been sick?

Patient: Since the first of October.

Dr. Murphey: Did it come on gradually or suddenly?

Patient: Before I gave in I had it about four days.

Dr. Murphey: What was the first thing you noticed that made you feel that you were sick?

Patient: Once or twice I thought I was sick, but did not say much about it, but then one day I went to the Captain and told him. He said I should go see a doctor, and the doctor gave me a little black bottle of medicine and told me to take three drops of it.

Dr. Murphey: Then what happened?

Patient: That night it jumped on me again, and I could hardly get a breath.

Dr. Murphey: What were you doing before you felt like that?

Patient: I was lying down, and the breath come shorter and shorter and I said I better get up and go and see, but I could not make it. I got half way and I stopped, but finally I got to the galley and the night cook give me a cup of tea, and after my breath commenced to get better I told him to go for the Mate. The Mate said he should go for the Captain, and he gave me some kind of medicine, and my breath got so short I got scared.

Dr. Murphey: Then when you got to land what happened?

Patient: I took a bus and went to the hospital.

Dr. Murphey: Have you been there ever since?

Patient: No, I felt all right after a while and the Captain said I could do anything I wanted, and I went back, and then it took me a second time.

Dr. Murphey: What were you doing then?

Patient: Well, one day I was kind of in a hurry for some meat and I went down and took a side of beef away from a boy that was handling it and took it myself. The Captain said I should never do that any more.

Dr. Murphey: The essential thing I wish to bring out in these cases is the fact that we have here two senile hearts. Both of the patients have been in hospitals, both have been carefully supervised so long as they were in the hospital. They both got better of the ailments that made it necessary for them to enter the hospital and they were dismissed without adequate advice as to how to regulate their subsequent lives so as to prevent recurrences. It does not matter how accurate we may be in the diagnosis of any heart condition, though we may talk about myocarditis, and myocardial degeneration, localize to our own satisfaction valvular defects, and go into the utmost refinement of cardiac diagnosis, yet if we do not properly warn the cardiopath as to what to do when he goes out of the hospital we are recreant in our

duty. Both of these men improved, and yet so far as we know on their initial and subsequent admissions they were both dismissed from the hospital without any word of guidance.

The problem of control of the breaking heart in youth, maturity and age, rests upon one thing only, and that is to ascertain what the physical limitations of the patient may be and then have him stay within them. We must build a fence around our patients of this type, and tell them how far they may go with safety. We must teach them that when they reach a certain point near the danger-line they must restrain themselves.

This one man went back to his boat, or dredge, and his work as a cook, and the young man did not carry the beef fast enough to please him, so he took it up himself, and broke his compensation. The first man went back to his work as a machinist, and soon had a break in his. We must learn some way to educate these cardiopaths, and we must learn to hew a very narrow middle path between too much information on the one hand and too little on the other. All of you men know that when you are dealing with a middle aged person, or even more those of sixty, seventy or eighty, you must be chary of giving medical information. If we tell these individuals that they have a "leaking heart" or this or that, we may awake in their minds a sense of terror, or fear, that is out of proportion to the gravity of the trouble, and reduce them to a state of continuous apprehension. It is better to say to them, "Sir (or madam) you have a soft heart muscle, and if you tax it beyond its ability it may develop into a heart disease which might take you off in a little while." I try to stress the point to these patients that with the passing of the years all the muscles of the body become inefficient; that our legs and arms are soft, and that we can not do the things we used to do, and we can not expect the heart to do what it used to do. We are fortunate if we can ask the brain to do what it used to do. As to the glandular system—we will leave that out of the discussion.

We have to consider very carefully what advice we shall give and be very careful how much latitude we may allow to the very sanguine and optimistic patient. Take the old boy who has worked like a dog up to seventy or seventy-five, who pats himself on his chest and says he is as good as any young man in the world, and that he is going out to play thirty-six holes of golf. He goes out and plays thirty-six, with what result? The stout man of sixty, no matter how well the heart functions, may not do what the lean man of forty may do, and two of my dearest friends have died on the golf course because they believed they were as good as ever they were, in spite of the fact that they had been warned. Exercise that is good for a man in good physical condition in the middle cycle is not appropriate for old age. We do not recognize this as we should. The pernicious zeal for exercise exhibited by some exceptional man who at seventy does all the marvelous things that he can do, and through the medium of the cheap magazines advises all other men of the same age to do likewise, is carrying a doctrinaire enthusiasm too far. Many men on the golf course, and on the tennis courts, would be better at home in a rocking chair. They should learn what their limitations are. If these two men had been advised what their limitations were when they were in the hospital with their acute cardiac breakdown, and had followed the advice, they would undoubtedly be in much better condition today.

However, they were sent out thoroughly unprepared as to how to adapt themselves to their economic necessities. One man's economic necessity is one thing and the next man's something else, but the best advice in these cases is to tell the patients to go home, find a rocking chair, sit down in it, and "stay sot." They should be instructed to lose weight, get rid of obesity, watch the heart and learn what its limitations are, in any given situation.

Above all things else the one point I wish particularly to stress is that the advent of dyspnoea marks the limit of cardiac resistance. No matter what a man is doing, if the doing of it makes him dyspnoeic he is

doing too much. This is the best thing to tell our patients of this type. There are two things I want you to carry in your minds: That dyspnoea means that the limit of cardiac effort is reached, and that fatigue disproportionate to the effort that is put out is a sign of cardiac weakness. It was to stress these two things alone that I brought this subject up this afternoon. I thank you.

CARE OF THE PREMATURE INFANT*

Clinic

A. J. WARING, M.D.,

Savannah

I have a series of private cases here, the mothers having been kind enough to let their babies come before us this afternoon. They are all premature children, ranging in age from five months to seven years. I want you to see the possibilities in some of these cases.

Case I: This first child is a girl, five and one-half-month-old, typically premature, with megaloccephala, a long body and short extremities. She was a six and a half months' baby, as nearly as we could tell, and was put aside because it was thought that it was not worth while to do anything, but someone found the child was breathing and it was revived. I did not see the child until she was four months' old. She was then being fed on Eagle Brand condensed milk, weighed five pounds and two ounces, and looked rather badly. The hemoglobin was only 45 per cent. She has gained thirty-six ounces in forty-two days and now weighs seven pounds and five ounces.

It is interesting to see a baby, supposed to be of nonviable age, found to be still breathing after being put aside as dead, worked over in a more orbless desultory fashion, and now doing very well.

Case II: This second child looks like a normal, attractive baby. It is now ten and a half months' old and weighs nineteen pounds and one ounce. It was an eight months' baby, and weighed a trifle over four

pounds at birth. It was breast-fed for a time, but was put on artificial food early because of lack of mother's milk. I have used acidified milk in these cases rather freely, because I could give high food value in small bulk. The child is gaining nicely.

Case III: This little child is particularly interesting. It is strictly a six months' baby, by actual computation. It is one of twins, the other twin having been born dead. This baby survived and after ten or twelve hours the obstetrician called me in. The baby was perfectly limp, could not swallow, and could not move. It was fed by nasal gavage for six weeks. Although oral gavage is usually advocated, in my experience nasal gavage works better. After twelve to twenty-four hours the child began having the series of cyanotic attacks, that so many of these premature infants have. It was a question whether or not it would survive, but to our delight it has done so. When the infant was twelve days old it weighed one pound and twelve ounces, and probably weighed about a pound and a half at birth.

The child now has twelve teeth, weighs twenty pounds and twelve ounces, and is doing very well. When it was a little under two months of age it developed whooping cough and was given up for lost, but in spite of everything the child has survived and now looks quite normal, at 12 months.

Case IV: This baby weighed two and a half pounds at birth, and has been very much of a proposition. Vigor has been good, but weight-gaining poor. When it was eight or nine months' old it was taking vegetable soup, egg yolk, orange juice, cereals, toast, apple sauce, and milk, as well as cod liver oil, but has always been a slow gainer. Nevertheless, the child is in good shape and is as bright as can be. Although there is considerable discussion in the literature about the mental development of these children, my experience has been that they do very well. I think most of the mental deficiency of the premature is due to cerebral hemorrhage, and fortunately this type usually does not survive.

Case V: This is the sister of the little child I just showed. Hemoglobin is about 60 per

*Informal Clinic before the Medical Association of Georgia, Savannah, Ga., May 9, 1928.

cent. Her weight and height for her age are perfectly normal, for she is not quite five. She told her mother that she was perfectly willing for Dr. Waring to see her undressed, but she "did not want a lot of doctors to see her raw meat." She was a seven months' baby and had a good deal of trouble in early life, but now looks quite normal.

In this climate I find that the premature children have much more trouble with anemia than with rickets.

Case VI: This last child is seven years old and weighed four pounds at birth. Last year she was one of twenty out of one hundred school children who won a blue ribbon. I have seen her only about once in the last year, but looked her up in order to present her to you. As you can see, she is apparently a perfectly normal child.

There are certain things we have to recognize in premature children; general debility, which I class with fragility, must first and always be considered. All vital functions are defective in development and activity. The respiratory mechanism in particular is not up to normal and may make the difference between life and death. Attacks of apnoea and cyanosis are most common. All of these children have been raised at home by the way. We do not have the electric beds and the facilities that our confreres have in the north and east and can do better in the home, for the average hospital in the far south has no special arrangements for the handling of prematures. These children must be watched day and night. This is extremely important. On the heat question, I have used everything. The baby's temperature is carefully watched. I have used a pair of "hot spots," I have used a stove, hot water bottles, an electric pad, etc. These children must get an unusual amount of water and food, one-fourth the body weight. Calories must be run up rapidly.

Infections do not enter into the question so much when we have children in the home. Anemia and rickets must be controlled as the child goes along. Orange juice and cod liver oil must be given early. I am using at present a preparation of raw spinach juice put up in honey, which seems to work well. They

must have sun baths. Of course many of these children die in the first year of life and about 51 per cent before puberty, so if you save any during the first year you have accomplished much so far as their survival is concerned.

When you see such a group as this, not arbitrarily chosen, it seems that in our climate at least the premature infant is well worth working over, even with limited facilities.

PATHOLOGY*

Clinic

LEE HOWARD, M.D.,
Savannah

I did not know whether a pathologist was supposed to present a living patient or not, but as these clinics are something of a venture with us I have worked out my clinic to suit myself. What I have in mind is to try to demonstrate by patients and some lantern slides the tremendous problem of trying to make a diagnosis of enlarged glands, particularly glands of a neoplastic nature.

Case I: Mixed infection; syphilis.

This boy, aged 23, a seaman, I present through the kindness of the Marine Hospital. He does not present much of a problem. He was admitted to the hospital on March 30, 1928, with an enlarged inguinal gland.

The family and personal history are unimportant. He stated that he had a soft chancre about two weeks before the swelling appeared in the left groin. The lesion, whatever it was, had entirely healed, but the inguinal swelling remained. He had no pain, but felt tired all the time. He had been treating himself.

Physical examination showed a well developed white male, weighing 142 pounds. The tonsils were large and cryptic, and the cervical lymphatics were said to be enlarged, but I have not been able to make out any enlargement of those glands.

*Informal Clinic before the Medical Association of Georgia, Savannah, Ga., May 9, 1928.

He was in the hospital for about two weeks, running a temperature of 99° to 100° F., sometimes to 103° F. At the end of two weeks the inguinal gland broke down and was incised, with discharge of pus.

The blood examination showed a leukocytosis indicating some acute suppurative process. After operation the temperature decreased and patient apparently recovered from the adenitis. When I saw him about a week ago it was thought that he had developed an extension from the suppurative process, and he was on table for a second operation. There was a hard mass above Poupart's ligament and well over in the pelvis. It was the size of an orange and did not feel like a suppurating gland, but was diffuse, somewhat spherical, not especially tender, did not fluctuate or have any of the appearances of the gland he had below. I advised against operation as I did not think the mass could be removed and there was no fluctuation. He still has a mass which is not one-fourth as large as when I saw him a week ago.

With any glandular enlargement there are so many possibilities that we cannot decide at once just what it is. His Wassermann reaction was 4+, and I feel that this is undoubtedly a case of mixed infection. After three injections of arsphenamin the glandular enlargement has greatly reduced in size. The blood examination eleven days ago showed 11,000 leukocytes, 68 per cent polymorphonuclear neutrophils. He has been free of temperature for a week, and I think will be all right under the arsphenamin treatment.

Case II: Lymphatic leukemia.

I regret that I cannot present this second patient, but within the past ten days he has had to go into the hospital, and is now in the last stages of his disease.

He is white, aged 21, a mechanic by occupation. He was first seen on February 15, 1928, but his trouble started about December 5, 1927.

His family and past history are unimportant. He gives no history of throat trouble or any enlargement of the glands prior to the trouble with the tonsils last fall. He states that within a short time his tonsils

became so enlarged that he could scarcely swallow and could hardly breathe through his nose. His tonsils and adenoids were removed by a nose and throat man about ten days after he first noticed his trouble, and at the same operation an eye in which the vision was lost when he was a child was enucleated.

He made an uneventful recovery from these procedures and was all right for about three weeks.

The interesting thing about this case is the point of origin of the disease and the tremendous size of the tonsils. To roughly describe them we may say that they were about the size of golf balls; 4x5 centimeters, and there was a huge mass of adenoid tissue, weighing 25 grams. The specimens you see here (presenting them) were sent to me to place in preservative and return. I did not make any sections as I was not requested to do so.

The tonsils were removed on December 15th and I first saw the patient on February 15th. The tonsils and adenoids were returned to me, and the following day the patient was sent for a general blood examination to see if he had Hodgkin's disease or some other glandular disorder.

The laboratory report made at this time was as follows: "Both tonsils are huge size, 4x5 cm. Tremendous mass of adenoid tissue, weighing 25 grams. Sections show tonsils and adenoid tissue to consist of a very cellular diffuse growth of lymphoid-like cells. The normal lymph follicles are obliterated, and the cells are very uniform in appearance and distribution. There is no pus cell infiltration or evidence of acute inflammatory change.

"W. B. C., 120,000. A stained smear showed over 90 per cent of the cells to be a typical lymphocytes, with single pale nuclei, an abundant amount of protoplasm and irregular in outline. Many so-called "smudged" cells and a few myelocytes.

"Pathological diagnosis: Taken together I feel that the picture is that of lymphatic leukemia, of the acute type. Other possibilities are lymphatic leukemia chronica, and

lymphosarcoma. In either case the prognosis is hopeless."

We sometimes get these atypical cells from neoplastic cells in the blood, but with the count as high as this and the other features of the case I do not think this is a possibility here.

When the patient came to me for examination Dr. Drane made a skiagram of his chest. On February 19th the x-ray showed mediastinal glands. He returned for examination because he found about three weeks after the tonsils were removed that his neck was becoming quite large, with enlargement of the glands on both sides. He could not get his collar on, and within a few days had to change from a size 15 to 16 1-2 collar. When I saw him the glands were the size of marbles and discrete, but there was no special enlargement of the other glands.

He was then given roentgenotherapy to the head and neck, on February 19th, and it was rather startling to see the neck decrease to normal size within a few days after this. He was given a treatment to the back on February 21st, to the right and left inguinal region on the 16th of April, and to the neck and axillae on April 21st. This treatment held the condition in abeyance, as it practically always does, but the picture now I think confirms the diagnosis made from the type of cells in the blood. He has never had any fever, although these patients usually run a low-grade temperature, and sometimes chills and quite high fever.

His progress has been general glandular enlargement; the spleen is down in the pelvis, he has had hemorrhages in both eyes, the eyelids being black and swollen, and he has coughed up and vomited blood. The case presents the atypical point of beginning in the tonsils, whereas as a rule the disease begins in the cervical glands, or the blood may show the initial findings. Many cases never show any glandular enlargement. The tremendous enlargement of the tonsils, the large cells in the blood and the lack of fever, all make the case interesting.

GYNECOLOGY*

Clinic

WILLIAM H. MYERS, M.D.,
Savannah

Case I: Intestinal tumor.

This patient, Miss M. B., white, aged 23, consulted me in 1924, when the following history was taken:

She was a saleslady by occupation, a widow, 5 feet 6 inches tall, and weighed 100 pounds. Her father died of cerebral hemorrhage at the age of 67. The mother was at that time in the final stages of carcinoma of the uterus. She had two sisters living and well; three brothers living and well, and one brother died at the age of 12, from an infection.

She had been operated upon seven years before, when both tubes were removed and the ovaries resected. For several years she had been having a great deal of pain in the lower right quadrant of her abdomen, and for the past three days had been constantly vomiting and violently purged. She gave a history of having been ill for six weeks early in the summer, at which time she suffered from nausea and vomiting, and she had not been well since that time. Menstruation ceased a few months after the operation seven years before.

Physical examination revealed what was assumed to be an incomplete intestinal obstruction, due to adhesions, and operation was advised.

The urine was normal, and the blood count revealed 7,100 leukocytes. The temperature was 99.5° F., the pulse 100.

A right rectus incision was made and a tumor two and a half inches long and one and one-half inches wide could be felt within the ileum. The intestine was opened and a dark gangrenous tumor exposed. The odor was very offensive and penetrating. The pedicle was clamped, tied and cut, the incision closed, and the abdominal wound closed in the usual manner. The patient

*Informal Clinic before the Medical Association of Georgia, Savannah, Georgia, May 9, 1928.

had a perfectly smooth convalescence and was discharged on October 11, 1924.

The true nature of the tumor could not be determined. The pathologist reported that the gangrenous nature of the tumor mass precluded any possibility of sectioning it, but he believed it to be an adenoma. Its gross appearance certainly indicated that type of lesion.

Intestinal tumors, like tumors elsewhere, are both benign and malignant and may be multiple or single. Tumors of the large intestine are usually multiple and benign, while those of the small gut are usually single and frequently malignant. Adenomata are the most common type, but lipomata fibromata, myomata, angiomas and other rare varieties are found in the small intestine. Adenomata tend strongly to malignancy, and are frequently the cause of intussusception. The spring from the crypts of Lieberkuhn. About 50 per cent of these tumors produce symptoms of obstruction or intussusception, and digestive disturbances and intestinal hemorrhage are also frequent manifestations. Cancer of the small intestine is very rare, but sarcoma is relatively common. However, 12 per cent of all cancers occur in the lower part of the intestinal tract, but of these only 4 or 5 per cent are found in this locality, the duodenum being about the only part so involved.

This patient has gained about thirty pounds since her operation, and aside from nervous phenomena incidental to the loss of ovarian function she enjoys perfect health. I regret that we cannot determine, by x-ray or otherwise, whether or not there are other tumors in the intestinal tract, but she certainly had no symptoms pointing to such involvement.

Case II: Spastic paraplegia due to developmental defects in the vertebrae and spinal cord. Cesarean section.

This patient, H.S., aged 33, single, colored, had a cesarean section in April, 1925.

According to the family history her father died of heart disease at the age of 50, and her mother of tuberculosis at the age of 30. She has three sisters and three brothers liv-

ing, one sister and one brother having died in infancy.

Her grandmother states that the patient's birth was very difficult, that she was never able to walk or use her feet, but was otherwise a very strong, healthy child. Menstruation began at the age of 13; the periods have been regular, but accompanied by much pain. Libido is normal. About three years ago she had an abscess over the sacral region, which was opened by a physician and healed promptly.

I was called to see her in March, 1925, and found that she was pregnant and would probably be at term early in April.

Examination showed that the head, neck, arms and chest were normal, except that the arms were greatly enlarged, and well developed, the hypertrophy being due to locomotion on the hands.

The pelvis was almost non-existent, as the abdomen ended just below the ribs and the development of the pelvis was arrested in infancy. The abdomen was very tender and painful. The pubic hair was normal in appearance, but the external genitalia had little resemblance to the normal, owing to the deformity and the very evident increased intra-abdominal pressure. There was some excoriation of the skin from urinary incontinence, which had always existed, but which had become worse, recently. No vaginal examination could be made except with one finger. The legs and thighs were greatly distorted, the heels being near the perineum, because of the abduction and outward rotation and flexion of the thighs and legs. The lower extremities were diminutive and perfectly spastic and fixed. Sensation was very poor in the feet and toes, somewhat better in the knees and thighs. Heat and cold sense was diminished. The Wassermann reaction was negative, the urine contained many pus and epithelial cells.

X-ray examination revealed the following findings: Total absence of all lumbar vertebrae, fusion of os innominata, so sacral outline, and a few small segments of coccyx. There was no bony connection between the twelfth dorsal vertebrae and the rudimentary

(Continued on Page 414)

AN INDICTMENT OF CHRONIC MALARIAL INFECTION WITH A PLEA FOR A REALISTIC ATTITUDE

GEO. MASSALON MURRAY, M.D.

Atlanta

To give a correct definition of Chronic Malaria would be difficult, for the differentiation between the acute and the chronic, or the infection and the state, is at best more or less artificial. Far too often that which is regarded and assumed as the acute is a recrudescence in the course of a Chronic Malaria, while that which is regarded as simply a Chronic Malarial State is in reality too frequently a relative parasitostasis. Therefore, while I specify chronic malarial infection, my indictment, in the broad sense, is directed against malaria in any and all of its forms, phases and states; since, in the majority of instances, malaria resolves itself sooner or later into the chronic form with a multiplicity of sequelae.

This resolution from the acute to the chronic form obtains from the fact that few individuals will lend themselves to an appropriate, intensive treatment at the time when this disease may be—or is assumed to be—an acute process; and it often requires a disability or a crippling of individuals to bring in for treatment even a LESSER proportion of the chronic malarial cases. Unfortunately, even in those cases lending FULL cooperation, we have no means of determining—by laboratory methods or procedures or by protracted observation for signs, symptoms and sequelae—when a complete eradication or absolute elimination has been accomplished, though our treatment may have been concluded. It would be unfortunate for our patients if we were to accept negative laboratory findings of malarial parasites as final in the face of positive clinical signs and symptoms EVINCING malaria, or, for that matter, signs and symptoms that are not quite so classical but still more or less cyclic in their behavior, SUGGESTING malaria. It is my firm belief that in the greater percentage of chron-

ic malarial cases the parasites cannot be demonstrated in the surface capillary blood stream. Nevertheless, repeated blood examinations should be made in every solitary instance.

We must universally be brought to realize that the agents which we are now employing are not specific, although they have long been regarded as such. To make myself plainly and unmistakably understood, I will make the positive statement that, from personal experience, I am convinced that quinine, arsenic, iron, mercury and arsphenamine are NOT specific for Chronic Malaria but, up to the present time, are the best agents we have. In the treatment of malaria we must have more reliable diagnostic measures as well as actually specific agents. As important as either of these, some means must be devised for determining with absolute certainty when eradication is complete and elimination secured. Otherwise, it would be safer for the patient to be regarded as PROBABLY malarial than to assume a cure after so-called active, appropriate observation treatment is completed; for in the majority of instances—more likely than not—only a relative parasitostasis has been attained, as a relative stasis is too often and too readily confounded with eradication.

In cases where we find malarial infection to be present, we have no means whereby we can determine whether the condition is produced by solitary infection or is the result of pyramided infection (infection added to infection) at varying intervals. It is my belief that in those cases in which the individuals were born, reared and continue to reside in sections which are malarial to any degree, more often than not, the infection is pyramidal; in other words, an infection added to an infection which may be either an addition to a chronic form (with apparently slight activity) or a relative parasitostasis. In either event, this contributes toward a more obstinate infection and consequently a more malignant process, though it is none the less difficult to demonstrate the parasites in the surface capillary blood or the general venous circulation. I believe the cases of pyra-

*Read before the National Malaria Committee at the 21st Annual Meeting of the Southern Medical Association, Memphis, Tenn., Nov. 16, 1927.

midal malaria far out-number the single or solitary infections.

In morbid conditions no examination is complete without due consideration being given to malaria as a possible precursor of those conditions—or as complicating such; for in playing its deceptive role, pursuing its insidious course, sooner or later malaria invades every branch and specialty of medicine. In like examinations syphilis has been accorded this consideration over malaria, although it is vastly easier to obtain a history of syphilis than that of malaria notwithstanding the wide prevalence and greater incidence of the latter. Of these two diseases the more elusive and obstinate—in my opinion—is Chronic Malaria. The elusiveness of chronic malarial infection is in direct proportion to the degree of the chronicity.

In view of the great elusiveness and obstinacy of Chronic Malaria it is difficult to understand why guides and standards of prenatal care do not regard it as essential to examine routinely for malaria as for syphilis. I am convinced that Chronic Malaria ranks very high as a primary cause of miscarriages and abortions, and also has its prenatal influence as well as its specific effect on infant mortality. The pre-eclamptic state and eclampsia occur too often in the fat, anaemic malarin for us to neglect to search for malaria as a frequent, predisposing factor or a contributing cause in such conditions.

At this time I believe it not inappropriate to report the evidence of symbiosis—noted in my work—which, I am convinced, exists between the plasmodium of malaria and certain bacterial forms,—notably the cocci and more especially the Gram negative diplococci in endocervical inflammatory states, and the staphylococci and—singularly enough—the albus. The albus, we well know, is regarded as of lesser malignancy and of localized tendency. We realize that, at best, satisfactory end-results in the treatment of gonorrhoeal endocervicitis are difficult to obtain. Fully aware of this, in cases that are particularly obstinate, we should bear in mind the probability of chronic malarial infection complicating the case; and because of this we should repeatedly examine the blood picture from

every angle and consider signs and symptoms in order to indict or rule out this elusive, insidious, obstinate infection—for, too often, malaria complicates, retards or prevents recovery of such cases. A more favorable course is promptly and distinctly noticeable in those cases where evidence of malaria is early disclosed and intensive, appropriate treatment instituted. It has been my observation that, in gonorrhoeal infection in the malarin, there is a higher degree of inflammation, a greater hypertrophy and a more profuse and obstinate discharge at the cervical site than in those females evidently not malarial.

Acne vulgaris of staphylococcic origin,—induced, exaggerated and protracted by Chronic Malaria in the young and in those below middle age (where malarial origin is recognized late or has been indifferently regarded and consequently inappropriately treated—or perhaps neglected by the individual),—often resolves itself into a generalized carbunculoïd process appearing in crops on extensor surfaces of forearms, sides of legs, buttocks, or back of neck with characteristic, extensive, deep induration and of obstinate, sluggish behavior. In some cases of this kind the albus has been isolated in pure culture. The treatment of gonorrhoea or of a carbunculoïd process resulting from an acne in the malarin should be regarded as a fight on a symbiotic process rather than against the separate behavior of bacteria and malarial parasites.

Inasmuch as the problem of the cause or origin of cancer is today claiming the attention of so many medical minds and taxing all available resources for research work, would it not be in order for us to include in such work the intensive study of the symbiosis which undoubtedly exists between Chronic Malaria and other chronic specific infections, chronic inflammatory states and chronic irritations as to the relation which malaria in symbiosis MAY bear to cancer and other malignant growths?

Pellagra (so-called) is, in my experience and to my belief—in the majority of instances—nothing more or less than a sign and a symptom of non-paroxysmal, atypical, elusive

Chronic Malaria or hook-worm infestation or both in an individual with a raw food deficiency; or, if raw food is available and not deficient, the presence of the superinduced and attendant gastro-intestinal dyspepsia renders it physiologically impossible of appropriation through an intestinal mucosa of low resorptive index sufficient to the needs and requirements of the individual. In such event there is the same disastrous result as when none or too little of the vital principles were actually available. A point of evidence as to the relationship of pellagra to Chronic Malaria, I believe, would be to encircle the malarial belts, for in so doing one would include the pellagra territories.

It is, I am confident, no mis-statement to say that as soon as malaria develops secondary anaemia of relative degree—a resultant state—promptly begins; and consequently every unrecognized, indifferently regarded or neglected secondary anaemia—arising from the chronic, specific infection of malaria—is potentially a case of tuberculosis. From my experience I am convinced that foremost among the chronic specific infections producing anaemias is Chronic Malaria. Too often, while malarial cases are being more or less appropriately treated, some supervening, acute infection, viz., influenza, patchy or lobar pneumonia, will induce an active, flashing tubercular process further to complicate the situation. In chronic malarins, in pneumonias with granulation apparent in the red blood picture, experience has taught me only too well that a guarded prognosis should be made, for too often there is a lethal exodus. In pneumonias, oxidation of the blood is insufficient enough without the increased disability imposed by granulation interfering with oxygen fixation in the red blood.

To my expressions of belief I would add that every case of unrecognized, indifferently regarded or neglected Chronic Malaria is potentially a minor or major surgical condition.

If carefully conducted, connected histories are to be regarded as informative and of real value (and we all agree, I am sure, that they are invaluable), it is not difficult to indict Chronic Malaria as the offender in this sequence: Chronic Malaria, secondary anae-

mia, hepatic imbalance, flatulent dyspepsia (gastro-intestinal type), appendicitis, cholecystitis (with or without the presence of gall stones), and—coincidentally or later—duodenal or gastric ulcer. To sum up: its wide prevalence, great incidence, elusiveness, insidiousness, obstinacy, progressiveness toward sequelae, atypical behavior, capacity for the crippling of individuals and the abbreviating of human lives lead me to believe that, as a menace to public health, Chronic Malaria heads the list of malignant diseases.

In addition to the aforementioned, I am convinced that Chronic Malaria, either of very evident or more often of the long-standing, atypical, elusive form, may be indicted too frequently as the precursor, or, through complicity in its symbiotic action and behavior as an important factor—if not the main influences—in the production of the following conditions or states of which some are to wit: acute dacryocystitis; ptosis (drooping upper eye lid); blepharitis; hordeolum; muscae volitantes (minute specks or motes apparently moving before the eye); acute and chronic iritis; acute conjunctivitis; retinitis; senile cataract in early years; sclerosis of middle ear (otitis catarrhalis sicca); otitis media acuta; acute mastoiditis; hay fever; bronchial asthma; acute catarrhal or purulent inflammation of accessory nasal sinuses; recurrent acute tonsillitis; chronic tonsillitis; hypertrophied tonsils; recurrent coryza; recurrent tracheo-bronchitis; recurrent acute and chronic bronchitis; aberrant dentition; dental caries; pyorrhoea alveolaris; simple acne vulgaris; acne rosacea; carbunculoid solitary and generalized furunculoses; eczema; eczematoid rash, with predilection for the extremities; verruca or wart; epithelial moles; ichthyosis; leucoderma; cloasmic splotches in the non-pregnant; leukaemia; splenomegaly (Banti's Disease); functional heart disturbance with haemic murmur, systolic in time with or without arrhythmia, with acceleration—though exceptionally a bradycardia; hysteria; neurasthenia; delayed appearance of menstruation in the adolescent; amenorrhoea; sterility; menorrhagia, through symbiosis of malaria with gonorrhoea; diminution or total abolition of sexual desire; premature climac-

teric; angina pectoris; low blood pressure or relatively low blood pressure (so often and consistently occurring in malaria that it should be regarded as a classical sign); chronic constipation; mucous colitis; hepatic imbalance and cholecystostasis, with or without icterus apparent; atrophic cirrhosis of the liver; hypertrophic cirrhosis of the liver; hepatic insufficiency; chronic malarial arthritis; chronic malarial neuritis; rickets; exceptionally, adiposa dolorosa; Bell's paralysis (facial paralysis) paralysis agitans; epileptoid seizures; migraine (sick headaches); non-senile gangrene; phlebectasis (or varix); fragility of bone; arthritis deformans with Heberden's nodosities; myalgia (Muscular rheumatism); lymph angiectasis (varicose lymphatics); regional and general anasarca.

I have gathered sufficient evidence to convince me that, of all the morbid conditions, states and sequelae consequent to a depraved blood with resultant anarchy of body chemistry and abnormality in glandular interchange, the greatest precursor is malaria. I consider that, to public health, the greatest single menace of all the chronic specific infections is malaria. The economic loss that may be definitely charged to malaria is admittedly stupendous. There is likewise an insensible loss, which, due to the unrecognized cases, must surely be enormous. The sum total, if known, would stagger us.

Since the behavior of Chronic Malaria in the life of the individual is so insufficiently understood by us to-day, the task before us would justify a national institute or sectional institutions for a most intensive study of the processes of Chronic Malaria in all of its stages during the life of the malarins; and for most carefully conducted autopsies in the known-to-be malarial subjects so as better to enlighten us as to the hidden, malignant nature of Chronic Malaria.

At this time I would make a plea for a national and an international realistic attitude in our fight against malaria. But first we should obtain a true concept. In order to convey a proper concept of this disease we must begin with a general, intensive, educational movement in the schools and with the

COMPLETE PROLAPSE OF THE RECTUM*

W. E. PERSON, M.D.,
Atlanta

The infrequency of this condition and the confusion as to its origin, and hence the likelihood of improper treatment warrants the presentation of this paper.

Complete prolapse is the participation of all the coats of the rectum in the process. In the partial or incomplete type, only the mucus membrane is involved. This paper, as the title states, will only consider the complete variety.

Moschowitz in an excellent paper 16 years ago reviewed all the literature, and added the results of his own studies. He concluded that complete prolapse was a hernia of the sliding type, with the same etiology as hernias in general and carried the same liability. His views have not been unanimously agreed to, by authors of text books on proctology. One book of recent publication does not even mention the hernial theory. Moschowitz deserves credit for establishing the etiology and suggesting the principles for its cure, therefore, I will avail myself of his contribution and quote him fully in presenting this paper.

Moschowitz says that the responsible factors for this malady are, first, an anatomical weakness; and second, increased intra-abdominal pressure—plus the constant effect of gravity.

In order to understand the formation of this hernia certain anatomical facts must be borne in mind. Lining the abdominal wall external to the peritoneum is a fascia—the transversalis fascia, though called by a different name in other locations. In the pelvis it is called the recto-vesical fascia. Figure 1. Whenever a vessel or viscus leaves the abdominal cavity it must penetrate the transversalis fascia. In the pelvis the rectum perforates this fascia, which is reflected onto the wall of the gut. Normally it unites so firmly that this union is able to support the viscera



Figure V.
Showing Barium in small intestine outside of pelvis.

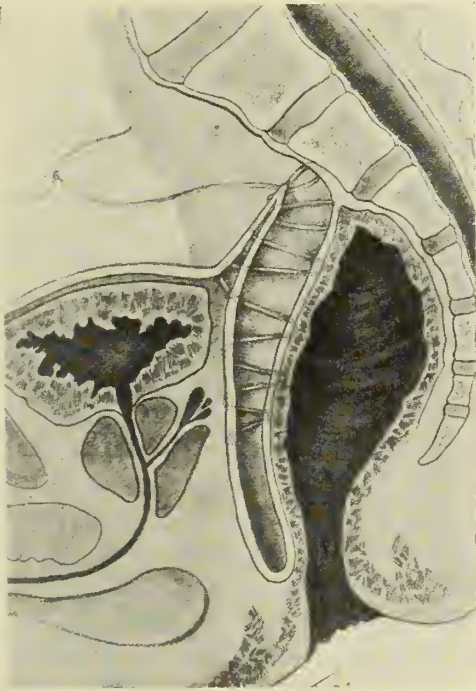


Figure VI.
Showing placing of sutures. Starting as low in pelvis as possible.

from above dilates the anus and stretches the sphincter to a marked degree. As the anal canal is fixed, it does not prolapse, but the rectum continues to invaginate and in time protrudes through the anus. It is literally turned wrong side out as would a coat sleeve. Figure 3.

Increased intra-abdominal pressure from any cause is a potent factor. In my six cases the causes were first, pregnancy 1; second, straining due to constipation 1; third, fili-



Figure VII.
Showing sutures placed. Dead space will not exist.

form stricture of the urethra 1; fourth, hard manual labor 1; and in two cases no definite cause.

Diagnosis. Pain is not a prominent symptom, though in two cases in Moschowitz's series there were pain in the coccygeal region, for which the coccyx was erroneously removed. Discomfort in the ano-perineal region and sacrum is present. Blood in the stool is present, and while not copious at any one time, severe anemia may follow as the loss over a period of time is considerable. Mucus and pus soon appear. In a fully developed case the sphincter is paralyzed, and incontinence results. A mass appearing through the anus makes the diagnosis easy.

Distinction must be made between the partial and complete types. A differential point of great significance is the finding of a sulcus in the complete variety between the wall of the anus and the everted rectum. Figure 4. The sulcus is about one inch from the anal opening. In the partial type no such sulcus is found, the prolapse begins at the mucocutaneous margin.

In the protruded mass tympany and gurgling can easily be demonstrated. A barium meal allows the x-ray to show the small in-

testine in the mass outside the anus. In one of my cases the small intestine was six inches below the tuberosity of the ischium. **Figure 5.** In the early stage diagnosis is not easy, though bulging of the anterior wall be felt and seen through the proctoscope. A skiagraph will show the small intestines abnormally low in the pelvis.

Treatment: The multiplicity of methods suggested for its cure is proof of their inefficiency. Briefly some of these methods are: Linear cauterization—either chemical or cautery—injections of the wall of the rectum, excisions of the mucus coat, plastic operations to narrow the anal outlet, anchoring the rectum posteriorly, resection of the rectum from below, and sigmoidopexy. **Figure 6.** None of the measures reach the anatomical defect, and failures are to be expected. Some of them are dangerous because of the possibility of opening the peritoneum and a peritonitis resulting.

Operation: The operative principles that cure other hernias are to be employed in this case. The sac must be obliterated and the normal support for the viscera will have to be restored. The abdomen is opened in a low mid-line incision, patient put in the Trendelenburg position, and the intestines packed away. The pelvis is swabbed out with iodine, and the peritoneum sacrificed in order to cause dense adhesions. Care is taken not to allow the iodine to touch any part of the peritoneum not in the area to be closed. Starting as low in the pelvis as possible the cul de sac is closed by sutures. I find it easier to suture from front to back. **Figure 7.** Moschowitz puts in purse string sutures. This closure is much easier in the female than in the male. The reasons are the pelvis is broader which permits a better approach, the uterus can be used for traction, and there is no fear of injuring the bladder. In the male the bottom of the pouch can not be reached. However, no dead space will remain as after the pressure is removed the walls will come together, and if previously irritated union is fast and firm. The organs to be avoided are the ureters and the internal iliac vessels. The recto-vesical fascia should be caught in the sutures. It is not

feasible to make any dissection to expose this fascia.

The paralyzed sphincter usually regains tone after the load is removed. Sometime, however, much time may be needed.

There were two deaths in my series of six cases. One of these was in a woman four days post-operative from pneumonia, the other in a male who had a fatal ileo-colonic hemorrhage three weeks post-operative. A partial autopsy was allowed. There was no infection or obstructive adhesions found. The ilium and cecum and transverse colon were filled with blood.

The death from hemorrhage was very unexpected and I was ignorant of its cause at that time, as it could not be attributed to the operation. In a recent case at operation the cecum before touched was observed to be filled with blood. Blood was also present in large amounts from the bladder, and it was firmly believed that no injury was done this organ. Later events proved this to be true. In both of these cases I was very anxious to demonstrate the small intestine to be in the prolapse and outside of the abdominal cavity by means of the x-ray. There was not the perfect liaison between the clinician and the radiologist that is muchly desired. Consequently repeated exposures were made. Dr. Fike the radiologist at the Steiner Clinic—after hearing the case recital expressed the opinion that the x-ray dosage was the cause of the bleeding. His views were confirmed by others. Bachem says that the colon, rectum and bladder mucosa are damaged and are liable to ulceration. He also states a very small dose is required. Colwell and Ross reached the same conclusion, but mentioned the small intestine. They experimented on dogs. For more accurate description their works should be read. From the above it is very probable that the colonic and bladder hemorrhage was due to the x-ray.

CONCLUSION

I think the proposition that complete prolapse of the rectum is hernia has been proven for the following reasons:

First: It has the same etiology.

Second: The prolapse is a protrusion of a viscus from its natural cavity. It contains

small intestine as shown by physical examination and the x-ray. These facts agree with the definition of a hernia.

Third: It is cured by the application of the same principles, namely obliteration of the sac, and the restoration of the normal supports.

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DISCUSSION ON PAPER OF DR. PERSON

Dr. W. A. Selman, Atlanta: It was my pleasure to see several of the patients Dr. Person had at the Grady Hospital and presented before the Fulton County Medical Society. I saw the one case operated upon, and wish to commend Dr. Person on his results. He has given special attention to this condition, and whenever cases of this type come to the Grady Hospital of the Emory Division, they are referred to Dr. Person. He has given special study to the cases and I am sure he should be commended on the results he has obtained in the case he reported and in some of the others which I have seen.

THE TYPHOID CARRIER

A woman in Massachusetts who prepared chicken salad for a wedding breakfast in May, which resulted in the death of two of the guests from typhoid fever, has been found to be a typhoid carrier. It is reasonably certain that an eight-weeks illness which she suffered eighteen years ago, was a case of typhoid fever and accounted for the present carrier state. She has been cautioned not to handle food intended for other persons. This case is "another example of the tragedies that may be innocently caused by typhoid carriers," and emphasizes the large factor played by the typhoid carrier in the spread of this disease today.—*Atlantic Medical Journal*, August, 1928.

CISTERNAL AND LUMBAR PUNCTURE

A comparative study of cisternal and lumbar fluids in syphilis made by Harry C. Saunders and Leo Spiegel, New York (*Journal A. M. A.*, Sept. 1, 1928), shows slight differences in cell count globulin reaction and colloidal cold reaction. It shows practically no difference in the Wassermann reaction. The interpretation of a spinal fluid analysis must not be based on a single finding, but on the results of the four tests in conjunction with the clinical examination. In view of the single differences that may at times exist in the two fluids, the distinct advantages to the patient following cisternal puncture should lead the observer to prefer this method to lumbar puncture.

MINUTES OF THE COUNCIL OF THE MEDICAL ASSOCIATION OF GEORGIA

FIRST MEETING

The first meeting of the Council was held on Tuesday, May 8th, 1928, at the Hotel De Soto, Savannah, Georgia, and was called to order at 9:40 p. m., by the Chairman, Dr. C. K. Sharp, Arlington.

ROLL CALL

The Secretary called the roll and the following Councillors responded:

First District—William H. Myers, Savannah.

Second District—C. K. Sharp, Arlington.

Third District—G. Y. Moore, Cuthbert.

Fourth District—O. W. Roberts, Carrollton.

Fifth District—E. C. Thrash and W. A. Selman, Atlanta.

Sixth District—M. M. Head, Zebulon.

Ninth District—C. L. Ayers, Toccoa.

Tenth District—S. J. Lewis, Augusta.

Eleventh District—A. S. M. Coleman, Douglas.

Twelfth District—J. Cox Wall, Eastman.

President Mulherin and Secretary Bunce.

REPORTS OF COUNCILORS

FIRST DISTRICT

Dr. William H. Myers: It is with no small degree of pleasure that signs of improvement in this District are noted. It is believed that interest in professional meetings has greatly increased, and it is my opinion that there is a greater realization of the value of organized medicine than ever before.

Last Mid-Summer Meeting of the First District Society was held in this City. It was by far the best we have ever had. There were more than one hundred in attendance and the program was of a very high order. There were distinguished visitors from within and without Georgia.

Last June the Societies of Burke, Jenkins, Screven, and Emanuel Counties held a joint meeting at McKinnie's Pond. I was present by invitation and found a good attendance and earnest workers.

The Mid-Winter Meeting of the District Society was held in Waynesboro April 10th. Owing to bad roads and inclement weather the attendance was not so good. There was a good program, however.

On April 29th I visited the Tri-County Society at Allenhurst, which is composed of the physicians in Effingham, Bryan and Lib-

erty Counties. Society officers and a delegate were elected.

There are some sections of this District which are far removed from any physician, and physicians sometimes cover a territory of a radius of thirty miles. There are a few quacks and irregular practitioners. The worst case of an irregular practitioner is at Springfield, where one Strange is practicing without any license or degree. Dr. Howard, of the same town, appealed to me last summer for relief from competition with this man. I at once took up the matter with the State Board of Medical Examiners, as well as with Strange himself, and copies of correspondence is herewith submitted. As usually happens, the next move was mine, but owing to the lethargy of our Solicitor Generals it takes money to prosecute these cases; therefore, we have been forced to inactivity by lack of funds for such purposes. There is an unlicensed negro practitioner in Liberty County, reported by Dr. B. H. Gibson. I requested him to get all data in the case and let me have them at this meeting.

The First District membership is as follows:

| County and Secretary | Members 1927 | Members May 1, 1928 |
|--------------------------|-----------------|------------------------|
| BULLOCH—CANDLER | | |
| W. E. Floyd, Statesboro | 21 | 22 |
| BURKE | | |
| R. L. Miller, Waynesboro | 16 | 15 |
| CHATHAM | | |
| A. A. Morrison, Savannah | 76 | 58 |
| EVANS | | |
| S. T. Ellis, Claxton | 6 | 6 |
| JENKINS | | |
| C. Thompson, Millen | 6 | 6 |
| SCREVEN | | |
| W. W. Evans, Haleyondale | 9 | 10 |
| TATTNALL | | |
| J. C. Collins, Collins | 9 | 5 |
| TRI-LIBERTY, LONG, | | |
| McINTOSH | | |
| B. H. Gibson, Allenhurst | 3 | 4 |
| TOTALS | 146 | 126 |

SECOND DISTRICT

Dr. C. K. Sharp: The Second District is about up to the average. There are still men who are eligible to membership in the County and State medical organizations who are without the fold and should by all means affiliate; could they but realize what an advantage it is to take an active part in organized medicine, they would without solicitation enroll their names and pay their dues.

Cooperating with the secretaries of the various county societies, I have written many of those who are eligible non-members a personal appeal; these letters may or may not have borne fruit. I have no way of determining. I have also offered to visit personally those counties that are behind in membership, but so far have received no requests to come.

On December 27th, as Chairman of the Council, I wrote to each Councilor throughout the State urging them to a little more action in getting their county societies organized early, and hope this has had some good effect. I received replies from a few of the Councilors that were encouraging.

Each County Society in the Second District was asked to get behind the proposed "Basic Science Bill" and work on their senators and representatives. This bill failed of passage, but let us bear it in mind for future action and line our forces up for a vigorous campaign before the time for the next session of the Legislature rolls around. This failure is but to point out to us and forewarn us as to how active the cultists are, with ample money and all prejudicial means at their command, to prevent constructive legislation and thus foster their nefarious practices.

The two resolutions passed by the Fulton County Medical Society concerning much needed legislation in the District of Columbia (a standard medical practice act for the District), and a bill the anti-vivisectionists are trying to have enacted that, if successful, would be a serious handicap to science, were received with the request that each county society act on them and forward a report of their action to the United States senators and representatives. This request was complied with and copies of the resolutions were made and forwarded to the secretary of each county society with request for action. These resolutions were acted on by the Second District Medical Society at a recent meeting in Bainbridge.

The Councilor of the Second District has not been active in securing data for the Committee on Medical History of Georgia, for the simple reason that he did not know how to proceed. It is hoped that some concrete plan will be adopted on which work along this line can be effectively done.

The Second District Medical Society is functioning well. There is much interest manifested at the semi-annual meetings. The April meeting was well attended, and a most interesting and instructive program was enjoyed by all present. These meetings are growing in interest and attendance. The District Society is serving a useful purpose.

The "Grim Reaper" has visited only one society, Tri-County. Three prominent physicians have been called from among us. Aside from those listed in our annual program, Dr. H. P. Fitzgerald, of Blakely, died suddenly on April 30th. These three were among our

best and most active men and we can ill afford to give them up.

The following is a tabulated report as to the conditions in each County Society:

| COUNTY | Members 1927 | Members 1928 | Eligible non-members | Ineligible | Deaths | Moved | Newly Located | Cultists | Remarks |
|----------------------|-----------------|-----------------|-------------------------|------------|--------|-------|---------------|----------|--|
| Baker Unorganized | | | | | | | | | Has 3 physi- cians; 2 are members Tri- County |
| Colquitt | 7 | 7 | | | | | | | |
| Decatur- Seminole | 14 | 14 | | | | | | | |
| Dougherty | 17 | 18 | | | | | 1 | 1 | No reg. time for meeting; no activities. |
| Grady | 10 | 10 | 2 | | | | | | Meets quar- terly; secy. does not report |
| Mitchell | 13 | 11 | | | | | | | |
| Thomas | 32 | 33 | | | | | 1 | | Meets 6 times 3 yearly; secy. does not report |
| Tift | 8 | 8 | 4 | | | | | 2 | |
| Tri-County | 23 | 21 | 3 | 1 | 3 | 1 | 1 | 1 | Calhoun-Early- Mitchell; m'ts quarterly. |
| Worth | 7 | 7 | 9 | 1 | | | | | Meets monthly. does not report activities. |
| TOTAL | 131 | 129 | 18 | 2 | 3 | 1 | 3 | 7 | |

THIRD DISTRICT

Dr. G. Y. Moore: The doctors of Clay County belong to the Tri-County and the Randolph County Medical Societies. The doctors of Quitman County belong to the Randolph County Medical Society. Those of Lee and Schley belong to Sumter County. I have visited every county in the District except Taylor County and our Vice-Councilor, Dr. Greer visited there. Since our last meeting we have lost three by death, Dr. Mangham, of Reynolds; Dr. Simpson, of Smithville, and Dr. Rogers, of Coleman. Dr. Rogers was the first President of the Randolph County Medical Society. Several doctors have left the Third District and only a few have moved into it. The doctors in the District have been quite active, most of the societies hold regular monthly meetings, and every county is 100 per cent except Dooly, and here there are two doctors in Schley and one in Lee County. I think every County Society has held a cancer symposium. The report of membership follows:

| County and Secretary | Members 1927 | Members May 1, 1928 |
|---------------------------|-----------------|------------------------|
| BEN HILL | | |
| L. S. Osborne, Fitzgerald | 9 | 12 |
| CRISP | | |
| J. N. Dorminy, Cordele | 17 | 16 |
| DOOLY | | |
| F. E. Williams, Vienna | 11 | 7 |
| MACON | | |
| C. P. Savage, Montezuma | 10 | 9 |
| RANDOLPH | | |
| G. Y. Moore, Cuthbert | 21 | 29 |
| STEWART-WEBSTER | | |
| J. M. Kenyon, Richmond | 15 | 13 |
| SUMTER | | |
| Henry A. Smith, Americus | 22 | 20 |

| | | |
|-----------------------|-----|-----|
| TAYLOR | | |
| J. C. Hind, Reynolds | 5 | 4 |
| TERRELL | | |
| Logan Thomas, Dawson | 11 | 12 |
| TURNER | | |
| J. H. Baxter, Ashburn | 7 | 7 |
| TOTALS | 128 | 129 |

Dr. Bunce: I feel that I should make a statement here. Dr. Moore has one more member in his District this year than last. He has the best organized District in the State by far, and he is the only one who has complied with the law which says the Councilor shall visit every County in his District each year. In my experience as Secretary-Treasurer, Dr. Moore comes nearer being a 100 per cent Councilor than any one we have ever had.

FOURTH DISTRICT

Dr. O. W. Roberts: I have devoted all the time I could put on the Fourth District this year. There are two things in our District that keep the membership from increasing. One is that we have a smaller number in the District, but the main thing is lack of interest among many who are there. We have a good society that meets once a year, in September. I was mired in the mud and missed the last meeting. Looking at the report County by County one would think there was a good opportunity there to do some work, and the opportunity remains. There are three or four counties with a small number of doctors scattered over a large territory. They work hard and do not take time to go to medical meetings. Some of the men in the District do not think they would get enough out of the State Association to pay them to belong, but they are willing to belong to the County Society. I have been working to organize Harris County, because I thought we might get an organization there. Some of them may belong to one of the other counties. I believe we will get at least 100 members in the Fourth District this year, but I cannot be positive. If I had nothing to do but make personal visits I might get them all in. The membership County by County is as follows:

| County | Members 1927 | Members 1928 | Decrease | Increase | Moved or Died |
|------------|-----------------|-----------------|----------|----------|------------------|
| Carroll | 18 | 15 | 3 | 0 | 1+1 |
| Coweta | 11 | 10 | 1 | 0 | |
| Meriwether | 6 | 7 | 0 | 1 | |
| Muscogee | 27 | 20 | 7 | 0 | |
| Talbot | 4 | 4 | 0 | 0 | |
| Troup | 31 | 31 | 0 | 0 | |
| TOTALS | 97 | 87 | 11 | 1 | 1+1 |

Heard, Harris, Marion and Chattahoochee Counties have no organization.

Dr. Bunce: For your information I wish to state that it is impossible for a man to belong to a County Society unless he is a member also of the State Organization. No one can belong to them separately. Likewise, no one can legally belong to the District Society unless he is also a member of the County Society.

FIFTH DISTRICT

Dr. E. C. Thrash: This District is unique in being made up almost entirely of Fulton County. Outside of Fulton County up to last year we had twenty-one members. At our last meeting we passed resolutions to have joint meetings with Fulton County, and invited the three small counties to meet with us. This was a splendid thing for those men, for it gives them an opportunity to attend scientific meetings in Fulton County. I checked up with the Secretary of the Fulton County Society in regard to some of the men who are not members of the County Society, and found there are something like 200, but there are only about thirty-five that 24—BUNCE MAG — \$jqolh'-m-fhL — we would accept in the Society at all. We are writing letters to all of these now and trying to get them in. We have about 200 doctors in Atlanta, who would not be eligible for membership in our County Society. The membership report follows:

| County and Secretary | Members 1927 | Members May 1, 1928 |
|-----------------------------|-----------------|------------------------|
| CAMPBELL | | |
| A. J. Green, Union City | 5 | 4 |
| DE KALB | | |
| B. V. Wilson, Decatur | 13 | 11 |
| DOUGLAS | | |
| D. Houseworth, Douglasville | 3 | |
| FULTON | | |
| Howard Hailey, Atlanta | 397 | 236 |
| TOTALS | 418 | 251 |

SIXTH DISTRICT

Dr. M. M. Head: It was quite a disappointment to me that I was unable to attend our meeting in Athens last year, but Dr. J. M. Anderson, our Vice-Councilor, made the annual report at that time. My expenses since 1927 have been \$30.81. It was my pleasure to attend the District meeting in Macon, and I expect to attend the meeting at Warm Springs in July. In my District we have four counties that work together, Clayton and Fayette, Crawford and Bibb, which really gives me eleven County Societies to contend with, and of this number nine are 100 per cent membership counties.

We have one Honorary Member in Butts County, and we lost one member by death in Pike County. One of my counties has three more members than last year, but the total membership for the District is eight

less than in 1927, exclusive of the three members who died. The following shows the standing of my counties May 1, 1928:

| County and Secretary | Members 1927 | Members May 1, 1928 | |
|-------------------------------|-----------------|------------------------|----------------|
| BIBB | | | |
| R. W. Richardson, Macon | 76 | 63 | |
| BUTTS | | | |
| J. Lee Byron, Jackson | 6 | 5+1 | Hon. Mem. 100% |
| CLAYTON-FAYETTE | | | |
| H. D. Kemper, Jonesboro | 9 | 10 | 100% |
| HENRY | | | |
| H. C. Ellis, McDonough | 7 | 8 | 100% |
| JASPER | | | |
| E. M. Lancaster, Shady Dale | 6 | 6 | 100% |
| JONES | | | |
| J. D. Zachary, Gray | 2 | 2 | 100% |
| LAMAR | | | |
| John M. Anderson, Barnesville | 7 | 7 | 100% |
| MONROE | | | |
| W. J. Smith, Juliette | 7 | 6 | |
| PIKE | | | |
| M. M. Head, Zebulon | 8 | 7 1 Death | 100% |
| SPALDING | | | |
| H. J. Copeland, Griffin | 16 | 19 | 100% |
| UPSON | | | |
| R. L. Carter, Thomaston | 11 | 11 | |
| TOTALS | 155 | 144 | |

SEVENTH DISTRICT

Dr. M. M. McCord: Report of membership from roster:

| County and Secretary | Members 1927 | Members May 1, 1928 |
|-----------------------------|-----------------|------------------------|
| BARTOW | | |
| W. W. Wofford, Cartersville | 14 | 14 |
| CHATTOOGA | | |
| H. D. Brown, Summerville | 12 | 13 |
| COBB | | |
| W. Mayes, Gober, Marietta | 21 | 10 |
| FLOYD | | |
| C. H. McArthur, Rome | 27 | 26 |
| GORDON | | |
| Z. V. Johnston, Calhoun | 10 | 7 |
| HARALSON | | |
| W. H. Malone, Tallapoosa | 1 | |
| MURRAY | | |
| E. H. Dickey, Chatsworth | 7 | |
| POLK | | |
| P. O. Chaudron, Cedartown | 8 | 11 |
| WALKER | | |
| J. H. Hammond, LaFayette | 18 | 14 |
| WHITFIELD | | |
| E. O. Shelhorse, Dalton | 11 | 11 |
| TOTALS | 129 | 106 |

EIGHTH DISTRICT

Dr. Stewart D. Brown: Report of membership from roster:

| County and Secretary | Members 1927 | Members May 1, 1928 |
|-------------------------------|-----------------|------------------------|
| CLARKE | | |
| E. D. Andrews, Athens | 25 | 24 |
| ELBERT | | |
| B. B. Mattox, Elberton | 11 | 13 |
| FRANKLIN | | |
| B. T. Smith, Carnesville | 9 | 11 |
| GREENE | | |
| Goodwin Gheesling, Greensboro | 4 | 5 |
| HART | | |
| W. E. McCurry, Hartwell | 7 | 6 |
| MADISON | | |
| W. D. Gholston, Danielsville | 7 | 5 |
| MORGAN | | |
| Dan M. Carter, Madison | 5 | 4 |
| NEWTON | | |
| W. D. Travis, Covington | 7 | 6 |
| WALTON | | |
| J. K. McClintic, Monroe | 9 | 9 |
| WILKES | | |
| H. T. Harriss, Washington | 10 | 8 |
| TOTALS | 94 | 91 |

NINTH DISTRICT

Dr. C. L. Ayers: In the Ninth District in 1926 there were 102 members of the State Association; in 1927 there were 104; in 1928 to date we have eighty-four members, but four counties have not sent in their reports. When they are sent in it will probably bring the membership up to, or slightly exceeding that of last year. In several of the counties there are active medical societies, which have regular meetings with good scientific and social programs. Most of the counties have an organization. We have had two good and well attended District meetings since our last meeting of the State Association. One was held in Gainesville in September, at which time we had the honor of having our president, Dr. Mulherin with us, and he gave us a very interesting address. The other meeting of the District Society was held at Canton in March. At each of these meetings there was a splendid scientific program. While in Canton many of the physicians took advantage of the opportunity to visit the large marble quarries of that section. The marble people manifested much interest in the meeting of the physicians in Canton, and seemed to regard the doctors as their friends. The Ninth District has been relatively free from quacks and impostors until recently, but at present in the grand old County of Habersham there is the most colossal quack who has ever insulted the profession of medicine. He has never seen the inside of a medical college of any kind, and poses as an Indian doctor. After one or two unsuccessful attempts the grand jury of Habersham County found a true bill against him, but he has not yet come to trial, and continues to do a lucrative practice. I doubt if there is a physician in the Ninth District with a larger income from practice than he has, yet all the physicians in the District pay \$15.00 a year professional tax for protection. Should not the State Board of Medical Examiners, who have the power to grant license and to refuse license to those desiring to practice medicine, have the power and funds furnished them to prosecute such impostors? I am sure there are other cases in Georgia somewhat similar to this, so let us be thinking about it and remedy these evils.

Two of the members of the Ninth District Society have died since our last meeting. On the whole, the medical profession in the Ninth District is in good shape, as you will see by the following report of membership:

| County and Secretary | Members 1927 | Members May 1, 1928 |
|--|-----------------|------------------------|
| BANKS Mat P. Deadwyler, Maysville | 1 | |

| | | |
|--|-----|----|
| BARROW W. L. Mathews, Winder | 8 | 7 |
| BLUE RIDGE C. B. Crawford, Blue Ridge | 7 | 4 |
| CHEROKEE George C. Brooks, Canton | 9 | 16 |
| FORSYTH Marcus Mashburn, Cumming | 8 | |
| GW'NNETT D. C. Kelley, Lawrenceville | 13 | 5 |
| HABERSHAM R. B. Lamb, Demorest | 12 | 9 |
| HALL Pratt Cheek, Gainesville | 21 | 22 |
| JACKSON J. C. Bennett, Jefferson | 14 | 5 |
| PICKENS H. G. Atherton, Jasper | 1 | |
| RABUN J. A. Green, Clayton | 3 | |
| STEPHENS C. L. Ayers, Toccoa | 7 | 8 |
| TOTALS | 104 | 76 |

TENTH DISTRICT

Dr. S. J. Lewis: The Tenth District Society has had two very successful meetings during the year. This organization is operating on an excellent basis, and it is expected that regular meetings will be held in the future. Relative to the problem of securing data for the proposed "History of Medicine in Georgia," I would like to state that progress is being made in this direction in the Tenth District. Already considerable material for this publication has been assembled, and it is believed that much more will be available during the next few months. The report of membership is as follows:

| County and Secretary | Members 1927 | Members May 1, 1928 |
|---|-----------------|------------------------|
| BALDWIN John W. Mobley, Jr., Milledgeville.. | 24 | |
| HANCOCK C. S. Jernigan, Sparta | 1 | 2 |
| McDUFFIE S. A. Bolland, Thomson | 1 | |
| RICHMOND Irvin Phinizy, Augusta | 102 | 68 |
| TALIAFERRO Thomas C. Nash, Philomath | 4 | 4 |
| WARREN R. C. McGahee, Warrenton | 5 | 4 |
| WASHINGTON B. L. Helton, Sandersville | 20 | 13 |
| TOTALS | 157 | 91 |

ELEVENTH DISTRICT

Dr. A. S. M. Coleman: We have had two very successful meetings of the District Society during the last year, the last in Brunswick in April. This was probably the largest attendance we have ever had, and every one had a good time. I think the District is in good shape, and we have several active societies down there in the counties. It is a pretty hard territory to cover, and some counties cannot be organized, but most of the men affiliate with some of the other societies, and I think we have most of the eligible men in the District. We feel that we are all right in the Eleventh District, and hope we will continue to have the cooperation we have enjoyed from the Secretary and President of

our State Association. Our membership is as follows:

| County and Secretary | Members 1927 | Members May 1, 1928 |
|------------------------------------|-----------------|------------------------|
| BERRIEN-LANIER | | |
| L. A. Carter, Nashville | 2 | |
| BROOKS | | |
| R. E. McClure, Quitman | 7 | 7 |
| COFFEE | | |
| T. H. Clark, Douglas | 10 | 12 |
| COOK | | |
| W. M. Shepard, Adel | 5 | 5 |
| GLYNN | | |
| J. W. Simmons, Brunswick | 9 | 10 |
| IRVIN | | |
| G. W. Willis, Ocilla | 4 | |
| LOWNDES | | |
| D. I. Burns, Valdosta | 15 | 18 |
| WARE | | |
| Kenneth McCullough, Waycross | 29 | 29 |
| WAYNE | | |
| M. N. Stow, Jesup | 10 | 8 |
| TOTALS | 91 | 89 |

TWELFTH DISTRICT

Dr. J. C. Wall: On succeeding Dr. T. C. Thompson last August, I was not informed that it was my duty to visit the different societies of the District, but I am going to shoot at that mark in the remainder of my term, and see if I cannot have our Secretary say about me what he said about Dr. Moore tonight. The Twelfth District is the largest in the State, and I am very glad to report that every county in the District except one has an organization. Our District Society is a very live organization. We have good meetings twice yearly, with an average attendance of from forty to fifty. During the time that I have had the honor to be Councilor I have written over 100 letters to members and advertisers in the Journal. During the session of the legislature I had sixty telegrams sent to senators and members of the House, asking their support of legislation that we were very much interested in. These telegrams were sent by friends and were all prepaid, which was quite a saving to our Society. I attended a called meeting of the Council in Atlanta last March. I hope we will continue to do as well as we are doing at present, for if we owe loyalty to anyone it is to our State Secretary. Our membership by Counties is as follows:

| County and Secretary | Members 1927 | Members May 1, 1928 |
|---|-----------------|------------------------|
| EMANUEL | | |
| R. C. Franklin, Swainsboro | 12 | 12 |
| HOUSTON-PEACH | | |
| E. L. Evans, Perry | 4 | 11 |
| JOHNSON | | |
| J. G. Brantley, Wrightsville | 4 | 4 |
| LAURENS | | |
| O. H. Cheek, Dublin | 18 | 17 |
| MONTGOMERY | | |
| J. E. Hunt, Mt. Vernon | 4 | 5 |
| OCMULGEE | | |
| BLECKLEY, DODGE, PULASKI, A. R. Bush, Hawkinsville | 13 | 13 |
| TELFAR | | |
| C. J. Maloy, Helena | 14 | 12 |
| TOOMBS | | |
| W. W. Odom, Lyons | 7 | 8 |
| TRENTLEN | | |
| L. I. Lanier, Soperton | 2 | 3 |
| TWIGGS | | |
| H. A. Rogers, Jeffersonville | 3 | 3 |
| WHEELER | | |
| W. A. Rivers, Glennwood | 2 | |
| TOTALS | 83 | 88 |

Dr. Bunce: I just want to say that when we get new Councilors and they get out and work and answer our letters it makes us just glad to be alive.

APPOINTMENT OF AUDITING COMMITTEE

The Chairman: I will appoint the following gentlemen to audit the books of the Secretary-Treasurer, and report at the next meeting of the Council. I understand the books are ready for audit:

Dr. M. M. Head, Zebulon.

Dr. William H. Myers, Savannah.

Dr. C. L. Ayers, Toccoa.

What is the next matter before us?

The Secretary: The next thing is the expenses of our invited guests. It was stated that the expenses of Dr. de Schweinitz are provided for, but we have to consider the expenses of Dr. Grulee.

Dr. Head moved that the Council recommend that the expenses of the honor guest of the Association be paid.

Motion seconded and carried.

The Secretary: The Committee on Public Policy and Legislation ask for an appropriation of \$500.

Dr. Thrash moved that this be paid.

Motion seconded by Dr. Head and unanimously carried.

The Secretary: The next question is the appropriation for the Committee on Medical Defense. Dr. Clark, as you know, could not be present at this meeting. The next senior member is Dr. E. C. Davis. I called him and he said that he expected to be here, but since he has not yet arrived, and since we are taking up appropriations, I think it would be well for us to consider this now. We have been allowing this Committee \$3,500.00, or as much thereof as they find necessary.

I move you, Mr. Chairman, that they be allowed the same amount this year.

Motion seconded and unanimously carried.

The Secretary: The next thing is a letter from Dr. J. L. Campbell asking for \$150.00 to carry on his work next year.

Dr. Thrash: We spent last year considerably more than we took in, and the outlook is that we are going to do more this year. Until our dues are raised I think we should retrench. I stated in my report that we did not wish any money, and would not expect any until our dues are raised. I move that this appropriation be not allowed.

Motion seconded by Dr. Head and carried.

The Secretary: The Committee on Health and Public Instruction asked for an appropriation.

Dr. Thrash moved that they be notified that the Association had no funds to appropriate for this purpose at present.

Motion seconded by *Dr. Head* and carried.

The Secretary: Some of the members of the Council have not yet sent in their expense accounts. As you know, the Association pays all of the expenses of the Councilors in connection with their duties, and we will appreciate it if you will send in your accounts promptly. When a Councilor cannot be present at the meeting the Association pays the expenses of the Vice-Councilor.

Dr. Thrash: The term of the senior member of the Committee on Medical Defense has expired, and the members of this Committee are elected by the Council.

Secretary Bunce read that portion of the Constitution (Section V, Chapter 6) pertaining to the election of the Committee on Medical Defense.

The Chairman: I think if we wish to vote for *Dr. Clark* we can do so, as he certainly has a legal excuse for being absent on this occasion. I so rule.

A vote was taken and when the ballots were collected and counted, it was found that *Dr. Clark* had received all ten votes.

The Chairman thereupon declared *Dr. Clark* re-elected as a member of the Committee on Medical Defense.

Dr. Mulherin moved to adjourn.

Motion seconded and carried, and the Council adjourned at 10:30 to reconvene at the call of the Chairman.

SECOND MEETING

The second meeting of the Council was called to order on Friday, May 11, 1928, at 8:00 a. m., by the Chairman, *Dr. C. K. Sharp*, Arlington.

ROLL CALL

The Secretary called the roll and the following Councilors responded:

Second District—*C. K. Sharp*, Arlington.

Third District—*G. Y. Moore*, Cuthbert.

Fourth District—*O. W. Roberts*, Carrollton.

Fifth District—*E. C. Thrash* and *W. A. Selman*, Atlanta.

Sixth District—*M. M. Head*, Zebulon; *J. M. Anderson*, Barnesville.

Ninth District—*C. L. Ayers*, Toccoa.

President *Mulherin* and Secretary *Bunce*.

REPORT OF AUDITING COMMITTEE

Dr. Head presented the following report: "We, the Committee appointed to exam-

ine the books of the Secretary-Treasurer, from the annual meeting in May, 1927, to the annual meeting in May, 1928, have checked each voucher and each bank deposit, and have found same neatly and correctly kept. We find that there is a balance of \$4,-720.57 in the treasury at present.

Respectfully submitted,

M. M. HEAD.

C. L. AYERS.

W. H. MYERS."

Dr. Moore moved that this report be accepted.

Motion seconded and carried.

The Chairman: We have received a message from *Dr. McCord* stating that he has been unable to be present because of sickness in his family.

The Secretary: The Chairman of the Committee on Constitution and By-Laws called my attention to the fact that we did not take any action on their report. That Committee recommended that the Constitution and By-Laws as now amended be printed for distribution during the year.

Dr. Thrash moved that this recommendation be granted.

Motion seconded and unanimously carried.

Dr. Thrash: Since it has come to the attention of the Councilors that there is not harmony in all counties, I move you, Mr. Chairman, that our Secretary be authorized to write to all Councilors calling their attention to their duty in maintaining harmony in their districts.

Seconded by *Dr. Ayers* and carried.

Dr. Head moved to adjourn.

Motion seconded and carried and the Council adjourned at 8:15, to reconvene following the election of officers.

THIRD MEETING

The first meeting of the new Council was called to order at 2:20 p. m., on Friday, May 11, 1928, by the Secretary, *Dr. Allen H. Bunce*, Atlanta.

ROLL CALL

The Secretary called the roll and the following Councilors responded:

First District—*William H. Myers*, Savannah.

Third District—*G. Y. Moore*, Cuthbert.

Fourth District—*O. W. Roberts*, Carrollton.

Fifth District—*E. C. Thrash* and *W. A. Selman*, Atlanta.

Sixth District—*M. M. Head*, Zebulon.

Ninth District—*C. L. Ayers*, Toccoa.

(Continued on Page 433)

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

SEPTEMBER, 1928

ALLEN H. BUNCE, M.D., Editor

H. L. ROWE, Business Manager

Publication Committee

E. C. THRASH, M.D., Chairman

A. S. M. COLEMAN, M.D.

M. M. HEAD, M.D.

Articles are accepted for publication on condition that they are contributed solely to this Journal.

Manuscripts should be typewritten, double-spaced, and the original (not the carbon copy) submitted. Used manuscript is not returned unless requested.

Communications and items of general interest to the profession are invited from all parts of the State. We especially invite county society secretaries to send us information of happenings in the county that would be of interest to the members throughout the State.

Reprints should be ordered within 30 days after the appearance of an article, since all type will be destroyed at the end of that time.

Editorial Department**OUR NEW PUBLISHERS**

At a recent meeting of the Publication Committee the contract for publishing the Journal for the next twelve issues, beginning with this month, was awarded to the Alliance Printing Company. In addition to printing the Journal the contract calls for a definite price for reprints. This new contract will effect a considerable saving to the Association as well as to those members desiring reprints.

The September issue has been delayed because of the necessity of resetting the material for the entire Journal.

We take this occasion to again remind you of the following rules of the Publication Committee:

1. All scientific articles, communications, reports of meetings, news items, etc., should

be submitted in exactly the form in which they are desired published. Drastic changes cannot be made after material is set up and galley proof furnished. The galley proof is submitted solely for the correction of printers' mistakes and can not be changed from the original copy.

2. Drastic changes can not be allowed in discussions after the galley proof has been furnished since this would often necessitate complete resetting of whole galleys. As it is customary to send stenographic copies of all discussions to the participants following each annual session, any and all desired changes should be made in these stenographic copies. These corrected copies should be returned promptly, otherwise discussion will be published as recorded by the official stenographer without alteration.

The Publication Committee earnestly requests the co-operation of all members in furnishing material in correct form for publication.

**INTER-STATE POST GRADUATE
MEDICAL ASSOCIATION**

The Inter-State Post Graduate Medical Association of North America will hold its annual session of clinics in Atlanta from October 15th to 19th. Pre-assembly clinics will be given by members of the Fulton County Medical Society on October 12th and 13th. The complete program is published in this issue of the Journal. All members of the Medical Association of Georgia are cordially invited to be present. Nearly one hundred of the world's most distinguished physicians will give clinics and demonstrations. The profession of Atlanta is preparing for over five thousand visitors during this meeting.

The Fulton County Medical Society especially invites all members of the Association to come in time for the pre-assembly clinics and remain over for the old fashioned Southern barbecue at Boulder Crest on Saturday.

SOUTHERN MEDICAL ASSOCIATION

The twenty-second annual session of the Southern Medical Association will be held in Asheville, North Carolina, November 12th through 15th. The President, Dr. William R. Bathurst, of Little Rock, is expecting one of the largest assemblies in the history of the Association.

The program for the general meeting and section meetings is one of the best ever arranged by any medical organization.

The Secretary-Manager, Mr. C. P. Loran, of Birmingham, with his customary efficiency, has left no stone unturned to make this a banner year.

Let us contribute our share by a full and representative attendance from Georgia.

RANDOLPH HEADS 1929 HONOR ROLL

On September 6th, 1928, we received from Doctor G. Y. Moore, the efficient secretary of the Randolph County Medical Society, a check in full payment of the 1929 annual dues from all eligible physicians in Randolph County. Thus Randolph County again heads the Honor Roll for 1929 as it did in 1928.

HELP TO WRITE THIS HISTORY

The Medical Association of Georgia is engaged in a most laudable enterprise, and one that is entitled to the public's liberal help, in collecting materials on the practice of medicine in our commonwealth's earlier days. What an interesting, what a valuable history can be written when the sources of knowledge on this subject are fully compiled! The association desires especially records and journals that will throw light on the doings of Georgia physicians and surgeons prior to the War Between the States and throughout that conflict—old medical volumes and pictures, letters, diaries, scrapbooks, account books, indeed, anything that may serve to recreate in the thought of today the science and art of healing as they were known and practiced among our Georgia grandsires. Material forwarded to Dr. Allen Bunce, secre-

tary-treasurer of the association, will be carefully preserved, it is announced, and will be duly returned.

A state whose annals are as rich as ours in noble leaders of this profession certainly should encourage the writing of its medical history. One of the great figures of colonial and revolutionary Georgia was Dr. Lyman Hall, of the Midway settlement, a signer of the Declaration of Independence and a tower of strength for patriotism. One of the immortals of the world of science is Dr. Crawford W. Long, who first demonstrated the power of anaesthetics in surgery. One of the finest spirits of American literature was Dr. Francis Orray Tickner, author of *Little Giffen, of Tennessee*, *Virginians of the Valley*, and other rare poems. Many another honored name would shine from the pages of the proposed history. And many questions concerning our economic and social and political past would grow clearer in the light of such a book, for the path of the physician winds through all things human.

The Medical Association of Georgia is heartily to be congratulated on having undertaken so important a labor of love. The Journal bespeaks for it the generous co-working of all who can aid, and wishes it abundant success.—Editorial, Atlanta Journal, July 27, 1928.

INSURANCE REPORTS

Resolution adopted unanimously by the Randolph County Medical Society: "Resolved, That it is the sense of the Randolph County Medical Society that we are under no moral or legal obligation to furnish professional services or expert professional opinion concerning any patient or reports concerning professional services rendered any patient, to insurance or indemnity companies, to industrial concerns or their agents, or for the benefit of any third party, unless paid customary fees charged by the medical men of our community for similar services rendered to private patients."

F. D. PATTERSON, M.D., *Pres.*

G. Y. MOORE, M.D., *Sec.*

District and County Societies

DISTRICT OFFICERS

FIRST DISTRICT

President..... Lanier, L. F., Rocky Ford
 1st Vice-Pres. Myers, Wm. H., Savannah
 2nd Vice-Pres. Elarbee, G. W., Daisy
 Sec'y-Treas. Long, W. V., Savannah

SECOND DISTRICT

President..... Chason, Thomas, Donalsonville
 Vice-Pres. S. E. Sanchez, Barwick
 Sec'y-Treas. Watt, Chas. H., Thomasville

THIRD DISTRICT

President..... Stukes, J. T., Americus
 Vice-Pres. Daves, V. C., Vienna
 Sec'y-Treas. Greer, Chas. A., Oglethorpe

FOURTH DISTRICT

President..... Clark, W. H., LaGrange
 Sec'y-Treas. Callaway, Enoch, LaGrange

FIFTH DISTRICT

President..... Fort, A. G., Atlanta
 Vice-Pres. Camp, R. T., Fairburn
 Sec'y-Treas. Evans, J. R., Decatur

SIXTH DISTRICT

President..... Miles, W. C., Griffin
 Vice-Pres. Miller, G. T., Macon
 Sec'y-Treas. Thompson, O. R., Macon

SEVENTH DISTRICT

President..... Harbin, R. M., Rome
 Vice-Pres. Wood, C. V., Cedartown
 Sec'y-Treas. McCord, M. M., Rome

EIGHTH DISTRICT

President..... D. M. Carter, Madison
 Vice-Pres. W. D. Gholston, Danielsville
 Sec'y-Treas. Gerdine, Linton, Athens

NINTH DISTRICT

President..... Coker, Grady N., Canton
 Vice-Pres. Neal, L. G., Cleveland
 Sec'y-Treas. Bennett, J. C., Jefferson

TENTH DISTRICT

President..... Cranston, W. J., Augusta
 Vice-Pres. McGhee, R. C., Warrenton
 Sec'y-Treas. Phinizy, Irvine, Augusta

ELEVENTH DISTRICT

President..... McMichael, J. R., Quitman
 Vice-Pres. Fleming, Albert, Folkston
 Sec'y-Treas. Reavis, W. F., Waycross

TWELFTH DISTRICT

President..... Franklin, R. C., Swainsboro
 Vice-Pres. Edmondson, J. W., Dublin
 Sec'y-Treas. Cheek, O. H., Dublin

1928 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 20, 1927.
2. Turner County, Dr. J. H. Baxter, Ashburn, November 15, 1927.
3. Terrell County, Dr. Logan Thomas, Dawson, December 1, 1927.
4. Pike County, Dr. M. M. Head, Zebulon, December 3, 1927.
5. Ben Hill County, Dr. L. S. Osborne, Fitzgerald, December 8, 1927.
6. Evans County, Dr. S. T. Ellis, Claxton, December 20, 1927.
7. Taylor County, Dr. J. C. Hind, Reynolds, January 3, 1928.
8. Jasper County, Dr. E. M. Lancaster, Shady Dale, January 6, 1928.
9. Talbot County, Dr. C. C. Carson, Talbotton, January 28, 1928.
10. Wayne County, Dr. M. N. Stow, Jesup, February 9, 1928.
11. Elbert County, Dr. B. B. Mattox, Elberton, March 1, 1928.
12. Lamar County, Dr. Jno. M. Anderson, Barnesville, March 6, 1928.
13. Terrell County, Dr. Logan Thomas, Dawson, March 7, 1928.
14. Stephens County, Dr. C. L. Ayers, Toccoa, March 8, 1928.
15. Upson County, R. L. Carter, Thomaston, March 15, 1928.

16. Crisp County, Dr. J. N. Dorminy, Cordele, April 5, 1928.

17. Henry County, Dr. H. C. Ellis, McDonough, April 10, 1928.

18. Dougherty County, I. M. Lucas, Albany, June 6, 1928.

19. Dooly County, Dr. F. E. Williams, Vienna, June 29, 1928.

20. Macon County, Dr. C. P. Savage, Montezuma, June 29, 1928.

21. Stewart-Webster Counties, Dr. J. M. Kenyon, Richland, June 29, 1928.

22. Sumter County, Dr. Henry A. Smith, Americus, June 29, 1928.

23. Emanuel County, Dr. R. C. Franklin, Swainsboro, July 3, 1928.

24. Rabun County, Dr. J. A. Greer, Clayton, September 18, 1928.

DISTRICT HONOR ROLL

1. Third District, Dr. G. Y. Moore, Councilor, Cuthbert, June 1, 1928.

1929 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 6, 1928.

NEW MEMBERS FOR 1928

Brooks, H. W., Columbus.
 Brooks, R. L., Columbus.

Burch, J. C., Alto.
Curtis, Walker L., Sparks.
Peacock, T. G., Thomaston.
Rawls, Lewis L., Macon.
Russell, C. C., Jasper.

EIGHTH DISTRICT MEETING

The Eighth District Medical Association held its annual session at Madison, August the 8th. The meeting was presided over by the President, Dr. J. E. Johnson, of Elberton. About fifty physicians were present.

Dr. C. K. Sharp, President of the Medical Association of Georgia, was a guest of the Association, and made an address in which he discussed the shortage of physicians in rural communities. He also made an appeal for funds for the Abner Calhoun Lectureship.

The following program was presented and much interest manifested by the discussions of the papers:

"Ureteral Stricture—Dr. H. W. Birdsong, Athens. Discussed by Drs. Hunnicutt and Birdsong, Athens.

"Chorea: A Dangerous Complication of Pregnancy; Report of a Case Treated By Cesarean Section"—Dr. John A. Hunnicutt, Jr., Athens. Discussed by Dr. C. W. Roberts, Atlanta; Dr. Linton Gerdine, Athens; Dr. H. I. Reynolds, Athens; Dr. S. S. Smith, Dr. Paul Holliday and Dr. Hunnicutt, all of Athens.

"Zinc Ionization In Chronic Purulent Otitis Media"—Dr. Arthur G. Fort, Atlanta. Discussed by Drs. W. H. Cabaniss and J. C. McKinney, Athens, and Dr. Fort, of Atlanta.

"The Treatment of Tuberculosis"—Dr. Allen H. Bunce, Atlanta. Discussed by Dr. Edgar McCurry, Hartwell; Drs. Paul Holliday and Guy O. Whelchel, Athens, and Dr. Bunce.

"Peptic Ulcer"—Dr. Stewart D. Brown, Royston. Discussed by Drs. Guy O. Whelchel, John Hunnicutt and Albert A. Rayle, Athens; Dr. L. R. Casteel, Metasville; Dr. Edgar McCurry, Hartwell; Harry L. Upshaw, Social Circle; C. W. Roberts, Atlanta, and Dr. Brown.

"Malformations of the Brain and Spinal Cord" — Dr. W. C. McGeary, Madison. Discussed by Drs. D. M. Carter and McGeary, Madison.

"The Treatment of Varicose Veins and Ulcers"—Dr. B. C. Teasley, Hartwell. Discussed by Drs. Paul Holliday, Athens, and Teasley, of Hartwell.

The Association were guests for luncheon of the Kiwanis Club of Madison, where, in a

stirring address, Dr. Allen H. Bunce delighted his hearers in his appeal for better rural hospital facilities and for the need of the Basic Science Law.

The next meeting of the Association will be held at Athens on the second Wednesday in August, 1929.

The following officers were elected for the ensuing year:

President—Dr. D. M. Carter, Madison.

Vice-President—Dr. W. D. Gholston, Danielsville.

Secretary and Treasurer—Dr. Linton Gerdine, Athens.

GYNECOLOGY—Clinic

(Continued from Page 395)

pelvis. The pelvic cavity was about 1 1-4 inches wide.

The patient went into labor on April 6, 1925, was taken to the hospital and classical cesarean section was performed under ether anesthesia, with the addition of bisecting and burying the tubes to prevent further pregnancy.

The pressure on the abdomen was very considerable, and as there was no pelvic cavity the uterus presented a very unusual appearance. The pelvis is about as large and deep as a small saucer, and the bladder looked like a small pedunculated tumor resting on top of the miniature symphysis pubis.

The infant was normal in all particulars and thrived as long as it was under observation, but died a few weeks later from a cause unknown to me.

The patient made a perfect recovery, except that she had a large abscess over the sacral region, which was opened and which was followed by a sinus, that still persists.

Several unusual features in this case make it confusing, but it is believed to be a case of infantile spastic paraplegia, due to developmental defects in the vertebrae and spinal cord.

An amateur photographer with a moving picture camera was engaged to take a picture of the operation, but so far forgot himself that he did not even get a shadow on the film.

402 Drayton St.

Georgia State Nurses' Association

OFFICERS

| | | | |
|--------------------|----------------------------------|--------------------|---------------------------------|
| President | Miss Annie Bess Feebeck, R.N. | | |
| | Grady Memorial Hospital, Atlanta | | |
| 1st Vice-President | Miss E. Alma Brown, R.N. | 2nd Vice-President | Miss Jessie Veazey, R.N. |
| | University Hospital, Augusta | | St. Andrews Apt., Atlanta |
| Secretary | Mrs. Alma E. Albrecht, R.N. | Treasurer | Miss Jane Van De Vrede, R.N. |
| | Georgia Infirmary, Savannah | | 105 Forrest Ave., N.E., Atlanta |

HAS THE GRADUATE NURSE BECOME WASTE PRODUCT?

In a recent address before the Ohio State Nurses' Association, Dr. May Ayres Burgess, Director of the Committee on the Grading of Nursing Schools, made a startling statement when she said that the graduate nurse has become the waste product of the training schools, due to the overplus of nurses being turned out annually by the 2155 schools of nursing in this country!

Recently compiled statistics show that about 18,000 graduates are added to the ranks of the nursing profession annually, and while many hundreds drop out, at least half this large number will remain in active nursing for a period of eight to ten years, and more than a third for twenty-five years or longer. The results of this over-production are already visible. Nurses over the country are out of employment for several months out of each year and the economic situation has become alarming.

What is more, no steps whatever have been taken to check this situation until now. If graduate nurses are the "residue" of training schools—and the proof appears adequate—a rapid process of adjustment is necessary and can only come about by earnest thought and cooperative effort on the part of leaders among the members of the two professions.

Figures indicate that 54% of the graduates are in private duty or general duty nursing, 19% in public health, 23% in institutional, and the remaining 4% are employed in miscellaneous capacities. In short, the majority of nurses graduated must turn to bedside or general duty nursing, and in planning for the economic and nursing welfare of both patients and nurses, this type of nursing service is the initial one to be considered. Except to know that they were suffering as individuals from an economic condition which affected them personally, nurses themselves have been blindly unaware until now of the true situation existing.

A few short years ago it is said the medical profession faced the problem of an over-production of students, with the result that the number of schools was cut down appreciably through a systematic campaign which reduced them to 79, and the annual number of graduates to less than 4,000. A similar thing must be done with regard to nursing schools, according to the Grading Committee's recent report. The time has come for a radical change in nursing service, which should be put upon a self-supporting and self-respecting basis.

"This Committee is interpreting modern nursing problems to the medical profession and is helping them to supplant unreliable opinions with definitely ascertained facts, making it possible for nurses and doctors to discuss plans for the future in a frankly constructive manner, on a friendly professional basis, of mutual understanding," says Dr. Burgess. "Summing up, private duty nurses must get together and work out experiments themselves and in cooperation with other groups they can revolutionize their services as rapidly as they care to."

GROUP NURSING

From material secured from more than four hundred superintendents of hospitals, in response to a questionnaire sent out by the Committee, group nursing, though not mentioned as such, was found to be the type of service given in most hospitals—that is, care of patients either by students or graduates—where each nurse takes care of three or four private room patients.

If group nursing is a satisfactory service where students do the nursing, it should be even more successful where graduates are used. It is felt that this type of service, well planned and well managed, will largely solve the present problem; and it is believed more hospitals would weigh carefully the matter of employment of graduates as against maintaining a school of nursing, if nurses themselves would encourage coordinated effect. Instead of working as "individuals," nurses must learn to be team-workers.

It is said some superintendents prefer student service; conversely, many superintend-

ents believe that the graduate sees more to be done for a patient and knows better just what to do, than a student, therefore, is capable of giving better care to patients.

Again, it is said many graduate nurses do not like bedside nursing, and for this reason would not like regular employment as such by hospitals; yet four out of ten nurses, according to figures gathered by the Committee, are willing to accept any type of service. Contagious, obstetrical and mental cases are the most unpopular, probably largely due to the fact that so few nurses have had special training in these lines. This being true, is it not time that nurses, like doctors and lawyers, should specialize in their profession? If nurse specialists, say in pediatric, psychiatric, surgical or obstetrical nursing, will group themselves and become organized for service, and if hospitals and registries will encourage nurses to so group themselves, the results in better service should soon be apparent, and the economic situation prevailing should be greatly improved.

Nurses should be carefully selected for their jobs on the basis of whether or not they are competent to take adequate bedside care of certain sick patients.

DOCTORS PREFER R. N.'s

Eighty-nine per cent. of the doctors co-operating in the survey of the Grading Committee have reported that they used R. N.'s on their cases. Some of the replies from these doctors are very interesting. One says: "In my opinion, there is a very real need for hourly nursing and for the care of several patients by one nurse in hospitals."

Another: "I feel very strongly that hospitals should register nurses who are graduates of other accredited institutions and assume a more tolerant attitude towards their working in institutions other than their own. It prevents 'clique' formation amongst nurses, and the interchange is beneficial. Practical nurses in my experience are in no way satisfactory. A far better solution is to hospitalize the patient on regular nursing service. * * More of the nursing care should be furnished by the hospitals themselves, or at least directly under the supervision of the hospital, and in most instances one nurse should care for two or more patients. It would increase efficiency and tend to reduce the already too high cost of hospitalization."

Still another doctor says: "Practical nurses in my experience talk too much and know too little. * * The physician can always trust the graduate nurse to do exactly as he says. Knowledge, coupled with a sunny disposition and a pleasing personality, is essential in the sick room."

"HOW CAN GENERAL DUTY BE MADE MORE ATTRACTIVE TO GRADUATE NURSES?"

Miss Anna D. Wolf, R.N., in her article in the September issue of the American Journal of Nursing, treats this subject extensively. She says: "The administrators of schools of nursing and of nursing services in hospitals with schools of nursing have come to a realization of the fact that for the sake of carrying out an educational program for their students they must rely upon other than student service for the care of patients; that they are responsible for a tremendous exodus of graduate nurses from their schools each year, and that many of these nurses are not finding employment. We can be assured that these numbers of unemployed will be increased and not decreased in the years to come with the same output of our schools as at present. Although one might point out other salient reasons for the employment of general duty nurses, two reasons remain paramount. First, that such employment of general duty nurses will stabilize the nursing service of a teaching hospital, enabling a better selection of students and a better teaching program to be carried out, as the students will not be depended upon entirely for the nursing care of the patients; second, that such employment will offer graduate nurses an excellent service which will prove profitable for both employer and employee."

Miss Wolf sums up the situation with several constructive suggestions, chief among which are (1) Nursing executives should feel responsible for building up a higher status for the general duty nurse. (2) The interest of this group should be stimulated and retained, each individual nurse being made to feel that she will be given an opportunity to engage in the service she prefers. (3) A 44-hour working week should be the aim, with a weekly schedule so arranged as to allow the nurse to know her program in advance if possible, with time for rest, recreation and a vacation. (4) Adequate compensation paid by the hospital, with increase for satisfactory tenure of service, and allowances made for room and board, which would permit the nurse to live out of residence if she desired. (5) Opportunity for educational advancement. (6) The services of the graduate nurse to be limited to those requiring a professional background. (7) Self expression should be encouraged and individual capacities recognized.

BOOK REVIEWS AND ABSTRACTS

Mark S. Dougherty, M. D.
Department Editor

Operative Surgery—By J. Shelton Horsley, M.D., F.A.C.S., Attending Surgeon to St. Elizabeth's Hospital, Richmond, Va. Third Edition, 893 pages. The C. V. Mosby Company, St. Louis. 1928. This book is a well written and well illustrated work on the technique of surgical procedures in general. The information of the first chapter regarding general considerations is well for any surgical practitioner to know. Surgical pathology from a practical point of view is well taken up. The etiology, resistance, metastasis and technical considerations in operations of malignancies are clearly and concisely reviewed. The remainder of the book is devoted mainly to operative technique in a clear concise manner, which is easy to read. The chapter on blood vessel surgery is particularly interesting. Throughout this work, even to the technical portion, "Principals of surgery of a fine surgeon," are outstanding. I do not hesitate to recommend this book most highly to the medical profession.

ASA BEACH, M.D.

Pathological Physiology of Internal Diseases, Functional Pathology, by Albion Walter Hewlett, M.D., B.S., formerly Professor of Medicine, Stanford Medical School, Professor of Internal Medicine and Director of Clinical Laboratory, University of Michigan. Revised in memoriam by his colleagues. One hundred and sixty-four illustrations. Pages 787, D. Appleton and Company, New York and London. Due to the tragic death of Dr. Hewlett in 1925 the present revision of this text was left incomplete. As a memorial to Dr. Hewlett his former colleagues at the Stanford Medical School under the editorial supervision of Dr. George DeForrest Barnett, took his notes and brought forward this new edition of his book. The book follows closely Dr. Hewlett's original outline and is divided into thirteen chapters as follows: I. The Circulation, II. Digestion and Absorption, III. The Metabolism, IV. Disturbances in Carbohydrate Metabolism, V. The Purin Metabolism—Gout, VI. Diseases of the Liver and Pancreas, VII. Disturbances of Respiration, VIII. Disturbances of Kidney Function, IX. Disturbances of Heat Regulation—Fever, X. Infection and Immunity, XI. The Blood, XII. The Endocrine Glands, XIII. The Nervous System. Each chapter is begun with a discussion of the normal physiology of the system under discussion. Then the pathological physiology and the departure from normal functional processes resulting from disease is presented. The subject matter is brought up to date and the relation of modern physiology to the practice of medicine is excellently brought out. This book should appeal to all in the practice of general medicine and internal medicine and is highly recommended.

MARK S. DOUGHERTY, M.D.

Clinical Examination of the Nervous System. Monrad-Krohn. Third edition. Paul B. Hoeber. 1926. This little book contains a most excellent outline of the methods of neurological examination, and the interpretation of neurological findings. Students and practitioners will find this book of great practical use. It is well illustrated, and contains some valuable original observations in regard to facial palsy, particularly of the type occurring in leprosy. The author states that in leprosy, a paralysis of the terminal branches of the facial nerve occurs, usually bilateral, and affecting chiefly the upper portions of the face, and the suprarab muscles. Marked ectropion of the eyes and mouth often occur. After describing the methods of examination of the sensory-motor system, including the vestibular tests, the author considers electrical examinations, and spinal fluid examination (including the jugular compression test in diagnosis of spinal block, and cisterna puncture). Then follows an outline of intelligence tests, tests for aphasia, diplopia and pharmacological tests of the vegetative nervous system. No more useful book on the subject is available, and it is small enough so that one can carry it in his pocket.

WM. A. SMITH, M.D.

BOOKS RECEIVED

Recent Advances in Chemistry in Relation to Medical Practice, by W. McKim Marriott, B.S., M.D., Dean and Professor of Pediatrics, Washington University School of Medicine; Physician in Chief, St. Louis Children's Hospital. Lecturer of the San Diego Academy of Medicine, Series of 1927. The Lecture Courses of the San Diego Academy of Medicine were established in 1926 for the purpose of acquainting medical practitioners with some of the more recent advances in the fundamental medical sciences. Contains 141 pages, illustrated. Publishers: The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis, Missouri. Price \$2.50.

Bacteriology For Nurses, by Charles F. Carter, B.S., M.D., Director, Terrell Carter Laboratory, Dallas, Texas; Director Laboratories, Parkland Hospital; Lecturer, Bacteriology and Pathology, Parkland Hospital School of Nursing. Contains 213 pages, illustrated. Publishers: The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis, Missouri. Price \$2.25.

Diabetic Manual for Patients, by Henry J. John. M.A., M.D., F.A.C.P., Maj. M.R.C., Director of the Diabetic Department and Laboratories of the Cleveland Clinic. Contains 202 pages. Publishers: The C. V. Mosby Company, 3523-25 Pine Boulevard, St. Louis, Missouri. Price \$2.00.

Mechanics and Chemistry of the Human Body (A Sequel to "Colonic Therapy") by O. B. Shellberg.

New York City. This book sets forth some of the basic principles governing the mechanical and chemical reactions of the intestinal tract, together with a description of a technic by which these reactions may be in a measure controlled, and an attempt made to re-establish normal physiological processes in those cases where irremediable damage has already occurred. Contains 44 pages. Publishers: The Shellberg Institute, Inc., 24 East 48th Street, New York City. Price \$1.00.

The Treatment of Diabetes Mellitus, by Elliott P. Joslin, M.D. (Harvard), M.A. (Yale), Clinical Professor of Medicine, Harvard Medical School; Consulting Physician, Boston City Hospital; Physician to New England Deaconess Hospital. Fourth Edition, Enlarged, Revised and Rewritten. Illustrated. Contains 998 pages. Price \$9.00 net. Publishers: Lea & Febiger, 600 South Washington Square, Philadelphia.

COMMUNICATIONS

COMMITTEE ON THE COST OF MEDICAL CARE

Dr. A. H. Bunce,
Secretary, Medical Association of Georgia,
Atlanta, Georgia.

Dear Doctor Bunce:

The Committee on the Cost of Medical Care, under the chairmanship of Dr. Ray Lyman Wilbur, and composed of a number of physicians, public health workers, economists and statisticians from various parts of the country, is engaged in making a study of the cost of sickness.

Dr. Sinai of the staff of the Committee has already begun on one of the important studies to be made under its auspices and will soon begin his work in your state. As a member of the Committee on the Cost of Medical Care and at the request of the Committee, I bespeak your kind consideration of Dr. Sinai and your cooperation in the work he is undertaking. It is the plan of the Committee to conduct a series of studies extending over a period of five years and to make the most complete examination possible into the costs of medical care. I am assured that the directing officers of the Committee have no preconceived ideas, no theories to prove, but that an earnest effort is to be made to get facts and to interpret these facts clearly and in a helpful manner.

In my opinion the proposed studies that are now being made and that are to be made are important and will be helpful in removing the impression which seems to exist in the popular mind that the biggest part of the cost of medical service is that involved in the physician's fee. I am convinced that that popular impression is wrong and that, when all the facts are brought out, it will be shown that the physician's fee is not the major factor in the situation as it seems to exist today.

Dr. Sinai and his associates will undertake to check each case coming under their attention in even minor particulars, and will seek the cooperation of individual physicians in developing the real facts. It will be

helpful if you, as Secretary of the Medical Association of Georgia, will do what you can to secure the cooperation of individual physicians and with them give proper guidance to this movement.

This letter is addressed to you by me as a member of the Committee on the Cost of Medical Care and in keeping with my promise to the Committee and is not written by me as a member of the official personnel of the American Medical Association.

Very truly yours,

OLIN WEST, M. D.

Chicago, August 6, 1928.

REPORTS TO LIFE INSURANCE COMPANIES

To the Editor:

As you have requested an "open forum" on the question of furnishing free information to Life Insurance Companies or Indemnity Companies concerning applicants, I would like to enter my protest against this practice unless a fee is exacted commensurate with the time and trouble taken in doing so.

Doctors have been proverbially "easy marks" for all manners of free service and I am of the opinion aside from true charity cases, which we all delight in attending and doing our best for, and certain public health work, we should be compensated for our work.

The most important factor in a life insurance contract is the doctor's examination; he stands as a protection against bad risk and yet he receives the lowest fee of all concerned at best. Am sure that it is but just to exact a fee of them for these reports which are equally important with the original examination, and expect to send my bill with the information desired, in the future.

Fraternally,

C. K. SHARP, M.D.

President.

Arlington, August 29, 1928.

To the Editor:

I have just read your editorial "Life Insurance Reports" in August issue of The Journal. I commend it most highly.

In answer to your question: "Is the information given solely for the benefit of the applicant?" No, the very information that you furnish may be the means of the rejection of the applicant. Again if it were for the benefit of the applicant the company would not interest itself in obtaining it.

To your second question as to how many companies would remain in business if they did not earn a profit the answer, of course, is NONE.

Your third question asking why they should not pay us for our services again can only be answered in one way, they should pay for any time that we spend in furnishing them with information. Often to answer their inquiry it necessitates a lot of time in looking up records and in giving detailed accounts, which I think should be paid for at the regular price

(Continued on Page 419, Second Column)

Woman's Auxiliary Medical Association of Georgia

OFFICERS

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| President | Mrs. C. C. Hinton, Macon | 3rd Vice-Pres. | Mrs. A. J. Mooney, Statesboro |
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| Mrs. C. W. Roberts | Atlanta | Mrs. H. M. Fullilove | Athens |
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DELEGATES TO THE A. M. A.

| | | | |
|--------------------|---------|---------------------|---------|
| Mrs. C. W. Roberts | Atlanta | Mrs. Geo. W. Fuller | Atlanta |
| Mrs. Dan Y. Sage | Atlanta | Mrs. J. Cox Wall | Eastman |

EIGHTH DISTRICT MEETING

Elberton, Ga., August 20, 1928.

The Eighth District Annual Meeting of the Woman's Auxiliary to the Medical Association of Georgia met Wednesday, August 8, 1928, at Madison. The meeting was held in the A. & M. School auditorium, with the Eighth District Manager, Mrs. D. V. Bailey, Elberton, in the chair. Mrs. H. G. Bannister, Ila, Secretary, with 21 present.

The following program was given:

Music—Mrs. D. M. Carter, Madison.

Invocation—Dr. A. W. Quillian, Madison.

Address of Welcome from City and County—Mrs. W. C. McGeary.

Response from Eighth District Auxiliary—Mrs. Paul Holliday, Athens.

Recognition of visitors and officers—Mrs. C. C. Hinton, State President, Macon; Mrs. Marion T. Benson, President-Elect, Atlanta; Mrs. C. W. Roberts, Atlanta.

Committees appointed.

Address by State President—Mrs. C. C. Hinton, Macon.

Activities of an Auxiliary—Mrs. C. W. Roberts, Atlanta.

Minutes of last meeting read and approved. Reports from County Auxiliaries were given. Mrs. D. V. Bailey was re-elected District Manager.

Meeting adjourned, and the members of the Auxiliary joined the doctors at a barbecue-dinner given by the Kiwanis Club of Madison.

Respectfully,

MRS. D. V. BAILEY, Manager.

COMMUNICATIONS

(Continued from Page 418)

that we charge for our time. This answers the fourth question also.

I know of no set of men who contribute as much of their time gratis as do physicians and I feel that certainly we are not called upon to do such work for those amply able to pay for it.

Yours fraternally,

R. L. MILLER, M. D.

Waynesboro, August 29, 1928.

AN UNUSUAL LETTER

A prominent physician in the Northwest recently addressed the following letter to the Abbott Laboratories:

"It is not common nor usual for me to acknowledge the receipt of pamphlets and literature from manufacturing chemists.

"However, I find your brochure—just at hand—relating to Ephedrine—such an admirable document, with such obvious efforts to supply tested information, that I hasten to compliment you upon it.

"It holds itself strictly to a statement regarding this valuable drug; to an enumeration of fields in which those of us who have used it must acknowledge its potency; it has an excellent bibliography."

Copies of the Ephedrine brochure referred to may be obtained on request to the Abbott Laboratories North Chicago, Ill.

IMPACTION OF FOREIGN BODIES IN ESOPHAGUS DURING VOMITING

B. M. Kully, Omaha (*Journal A. M. A.*, June 9, 1928), says that foreign bodies that have passed into the stomach may be subsequently impacted in the esophagus. The subjective sensation of a foreign body being present is sufficient indication for endoscopic investigation.

PROGRAM

International Assembly Inter-State Post Graduate Medical Association of North America

OCTOBER 15 TO 19, 1928, ATLANTA, GA.

Pre-Assembly Clinics of Atlanta Hospitals.
October 12th and 13th

INVITATION

To the Medical Profession of America:

The Inter-State Post Graduate Medical Association of North America extends a cordial invitation to all physicians in good standing, to attend the International Assembly of the Association, to be held in the City of Atlanta, Georgia, October 12th to 19th, inclusive, 1928. An exceedingly interesting program has been arranged, and in co-operation with the Fulton County Medical Society (Atlanta) and the Medical Association of Georgia, an unusual opportunity for an intensive week of post graduate education, both clinical and didactic, is offered.

LEWELLYS F. BARKER, M.D.,
President.

WM. B. PECK, M.D.,
Managing Director.

EDWIN HENES, JR., M.D.,
Executive Secretary.

GREETINGS

Inter-State Post Graduate Medical Association of
North America—Greetings:

As President of the Fulton County Medical Society, I wish to most cordially invite the Inter-State Post Graduate Medical Association of North America to hold its next Assembly in Atlanta, Georgia, during the week of October 15th, promising them the hearty co-operation of the Fulton County Medical Society. With best wishes for its most successful session.

E. C. DAVIS, President,
Fulton County Medical Society.

Inter-State Post Graduate Medical Association of
North America—Greetings:

On behalf of the Medical Association of Georgia, I hereby extend a cordial invitation to the Inter-State Post Graduate Medical Association of North America to hold its 1928 International Assembly at Atlanta, Georgia, October 15th to 19th, as guest of the Medical Association of Georgia.

Respectfully,
C. K. SHARP, President.

Inter-State Post Graduate Medical Association of
North America—Greetings:

It affords me great joy and profound pleasure to extend to the distinguished organization of scientists, The Inter-State Post Graduate Medical Association of North America, a most cordial invitation to meet in Atlanta in October.

America's greatness is the result of the lives of such men as those who are members of this Association, and a true welcome awaits those who will attend the meeting in October.

It is quite fitting that Georgia should have been chosen for the honor of entertaining this celebrated body of men, for was not that Master of Pain, the discoverer of Sulphuric Ether, which made possible through surgical procedure, operations that otherwise would have been impossible, a true and renowned Georgian?

Therefore, as Chief Executive of the State of Georgia, I again extend to these modern "Hippocrates" a

hearty and joyous invitation to be guests of our great state during their convention in October of this year.

Very respectfully yours,
L. G. HARDMAN,
Governor of Georgia.

Inter-State Post Graduate Medical Association of
North America—Greetings:

Atlanta is glad to welcome the Inter-State Post Graduate Medical Association of North America.

It is an honor and distinct compliment to be privileged to entertain this distinguished gathering of leaders of the medical profession.

We hope that every delegate and visitor to the convention will be pleased at Atlanta's hospitality. It is Atlanta's way to make her visitors feel at home. We want you to become acquainted with the city, see the points of interest, meet our people. We know you will want to return.

We hope that deliberations of the Association will be fruitful of constructive accomplishment.

I. N. RAGSDALE,
Mayor of Atlanta

Inter-State Post Graduate Medical Association
of North America—Greetings:

To the Inter-State Post Graduate Medical Association of North America: Atlanta extends a cordial welcome.

Combining the historical charm of the old South with the progressiveness of the modern twentieth century, Atlanta is ever on the alert to secure those gatherings that enrich our civic life and leave an indelible impression upon those who are privileged to hear, not only the greatest thinkers of our own country, but also the best that the old world has produced.

Such a meeting is your Assembly and it is our belief that through those who attend, the influence of this meeting will be far reaching in effect and of inestimable value to our section. It will be our pleasure and privilege to accord you every courtesy and to make you realize that the traditional reputation for Southern hospitality is not an empty phrase, but an everyday practice in this teeming metropolis of the Southeast.

We invite you to Atlanta and believe that the co-operation you receive from local press, from the members of your profession, and from the citizens of Atlanta, will make this 1928 Assembly one of the best in the history of your organization.

Sincerely,

MILTON DARGAN, JR., President,
Atlanta Chamber of Commerce.
FREDERIC J. PAXON, President,
Atlanta Convention and Tourist Bureau.

OFFICERS

OF THE INTER-STATE POST GRADUATE MEDICAL
ASSOCIATION OF NORTH AMERICA
OFFICERS OF THE ASSOCIATION

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Dr. Lewellys F. Barker, Baltimore, Maryland.

President of Clinics,

Dr. William J. Mayo, Rochester, Minnesota.

Dr. Charles H. Mayo, Rochester, Minnesota.

President-Elect,

Dr. John B. Deaver, Philadelphia, Pennsylvania.

Managing-Director,

Dr. William B. Peck, Freeport, Illinois.

Executive Secretary and Director of Exhibits,

Dr. Edwin Henes, Jr., Milwaukee, Wisconsin.

Treasurer and Director of Foundation Fund,

Dr. Henry G. Langworthy, Dubuque, Iowa.

Speaker of the Assembly,

Dr. George V. I. Brown, Milwaukee, Wisconsin.

FULTON COUNTY MEDICAL SOCIETY (ATLANTA)
Dr. E. C. Davis President
Dr. Chas. E. Waits Vice-President
Dr. Wm. H. Hailey Secretary and Treasurer

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| Dr. M. A. Clarke | Parliamentarian |
| Dr. Allen H. Bunce | Secretary and Treasurer |

Honorary General Chairman.

Honorable Dr. L. G. Hardman, Governor of Georgia
 Honorary General Vice-Chairman..... Dr. E. C. Davis
 Honorary General Vice-Chairman.

Dr. Thos. F. Abercrombie
 General Chairman Dr. Marion T. Benson
 Director of Clinics Dr. Chas. W. Roberts

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| Dr. Frank K. Boland | Dr. Russell H. Oppenheimer |
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| Dr. Wm. H. Hailey | |

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| Mrs. William H. Hailey | Mrs. G. Pope Huguley |

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| Mrs. L. C. Fisher | Mrs. W. C. Warren, Sr. |
| Mrs. L. M. Gaines | Mrs. Bernard Wolff |
| Mrs. L. Sage Hardin | Mrs. H. L. Wright |
| Mrs. G. Pope Huguley | |

ENTERTAINMENT

Program of Entertainment for the Women Guests to the Inter-State Post Graduate Assembly, October 12th to 20th, 1928, Atlanta, Ga.

FRIDAY AND SATURDAY, OCTOBER 12TH AND 13TH

9:00 A. M. Registration at the Wesley Memorial Church. Visiting Ladies are requested to register as early as possible after their arrival in the city. Local doctors' wives will please register at this time in order to receive badges, posters for automobiles, etc.

SUNDAY, OCTOBER 14TH

10:00 A. M. Registration at the Biltmore Hotel.

8:00 P. M. Concert, Ball Room of the Biltmore Hotel.

MONDAY, OCTOBER 15TH

3:30 P. M. Fashion Show, Tea Room of the Davison-Paxon Company, (affiliated with R. H. Macy Company of New York), followed by an inspection tour of the store. This event has been especially arranged for the guests to the Inter-State Post Graduate Assembly and for the members of the Woman's Auxiliary to the Fulton County Medical Society through the courtesy of the Davison-Paxon Company. Visiting doctors are also invited.

TUESDAY, OCTOBER 16TH

2:30 P. M. Automobile ride around the city and to the Cyclorama at Grant Park. All visiting ladies are requested to assemble at the Biltmore Hotel, the starting point, at 2:15 P. M.

3:30 P. M. Tea at the State Executive Mansion. Governor and Mrs. L. G. Hardman will be assisted in receiving by members of the Woman's Auxiliary to the Fulton County Medical Society.

Joint Entertainment (Ladies and Gentlemen) Given by the Fulton County Medical Society

Wednesday Night, October 17th, Reception, 9:30 P. M., Biltmore Hotel.

Friday Night, October 19th, Annual Banquet, Biltmore Hotel.

Saturday, October 20th, 12:30 P. M., Old Fashioned Southern Barbecue, Boulder Crest Estate. (Details at Assembly.)

Saturday Afternoon, October 20th, Football Game, Notre Dame vs. Georgia "Tech."

WEDNESDAY, OCTOBER 17TH

10:00 P. M. President's Reception and Dance, Ball Room of the Biltmore Hotel.

THURSDAY, OCTOBER 18TH

10:30 A. M. Automobile ride to Stone Mountain. Guests will please assemble at the Biltmore Hotel at 10:15 A. M.

FRIDAY, OCTOBER 19TH

8:00 P. M. Banquet, Biltmore Hotel. Tickets may be secured at the Auditorium-Armory.

SATURDAY, OCTOBER 20TH

12:30 P. M. Barbecue, Boulder Crest Estate. Visiting and local doctors and their wives are invited. Visiting ladies who wish to play golf while in the city will please register for same at the Registration Booth at the Auditorium-armory.

PRE-ASSEMBLY CLINICS

OCTOBER 12TH AND 13TH, 1928

Wesley Memorial Church, 63 Auburn Avenue, N. E.

FRIDAY, OCTOBER 12TH

9:00 A. M. Dr. Newdigate Owensby, Psychiatry.
 9:30 A. M. Dr. E. D. Highsmith, Plastic Surgery.
 10:00 A. M. Drs. Chas. Boynton and Wm. N. Adkins, Pediatrics.
 10:30 A. M. Drs. W. S. Goldsmith and L. G. Baggett, Abdominal Surgery.
 11:00 A. M. Drs. J. E. Paullin, Sauls, and Bowcock, Medicine.
 11:30 A. M. Drs. Chas. Dowman and Smith, Neuro Surgery.
 12:00 M. Dr. W. A. Smith, Neurology.
 12:30 P. M. to 1:30 P. M. Lunch, Wesley Memorial Church, Dining Hall.
 1:30 P. M. Drs. F. P. Calhoun and Grady Clay, Eye.
 2:00 P. M. Dr. J. C. Johnson, Gastro-Enterology.
 2:30 P. M. Drs. John Denton and Walter Holmes, Gynecology and Cystoscopy.
 3:00 P. M. Drs. Cyrus Strickler and Reynolds, Medicine.

- 3:30 P. M. Drs. Chas. Waits and T. C. Davison, Thyroid.
 4:00 P. M. Drs. Funkhouser, Hines and Roberts, Pediatrics.
 4:30 P. M. Drs. Dunbar Roy and Equen, Ear, Nose and Throat.

SATURDAY, OCTOBER 13TH

- 9:00 A. M. Dr. E. C. Thrash, Medicine.
 9:30 A. M. Drs. Frank Boland and Dan Elkin, Chest Surgery.
 10:00 A. M. Dr. Jack Jones, Dermatology.
 10:30 A. M. Drs. Lawton Thornton and W. R. Smith, Orthopedic.
 11:00 A. M. Drs. Allen Bunce and Hal Davison, Medicine.
 11:30 A. M. Drs. J. R. McCord and R. A. Bartholomew, Obstetrics.
 12:00 M. Drs. J. A. McGarity and J. K. Fancher, Medicine.
 12:30 P. M. Drs. E. G. Ballenger and Earl Floyd, Genito Urinary.

PROGRAM

International Assembly of the Inter-State Post-Graduate Medical Association of North America, Atlanta, Ga., October 15th, 16th, 17th, 18th and 19th, 1928, City Auditorium

MONDAY, OCTOBER 15TH

Diagnostic Clinic.

Dr. C. Jeff Miller, Professor of Obstetrics and Clinical Gynecology, Tulane University of Louisiana School of Medicine, New Orleans, La.

Diagnostic Clinic.

Dr. Walter A. Bastedo, Assistant Clinical Professor of Medicine, Columbia University College of Physicians and Surgeons, New York, N. Y.

Diagnostic Clinic.

Dr. John M. T. Finney, Professor of Clinical Surgery, Johns Hopkins University School of Medicine, Baltimore, Md.

Intermission for Review of Exhibits

Diagnostic Clinic.

Dr. Wm. C. Quinby, Professor of Genito-Urinary Surgery, Harvard University Medical School, Boston, Mass.

Diagnostic Clinic.

Dr. Donald C. Balfour, Professor of Surgery, University of Minnesota Graduate School of Medicine, Mayo Clinic, Rochester, Minn.

Diagnostic Clinic.

Dr. Laurence R. DeBuys, Professor of Pediatrics, Tulane University of Louisiana School of Medicine, New Orleans, La.

Noon Intermission

Diagnostic Clinic.

Dr. John F. Erdmann, Professor of Surgery, New York Post Graduate Medical School, New York, N. Y.

Symposium on Gastro-Intestinal Diseases

"Methods of Diagnosing Diseases of the Esophagus."

Dr. Porter P. Vinson, Mayo Clinic, Rochester, Minn.

"Principles of Gastric Surgery."

Dr. Donald C. Balfour, Professor of Surgery, University of Minnesota Graduate School of Medicine, Mayo Clinic, Rochester, Minn.

Intermission for Review of Exhibits

Symposium on Gastro-Intestinal Diseases, Continued
 "Recent Advances in the Treatment of Intestinal Obstruction."

Dr. Thomas G. Orr, Professor of Surgery, University of Kansas School of Medicine, Kansas City, Mo.

"Diverticulitis and Its Surgical Treatment."

Dr. John M. T. Finney, Professor of Clinical Surgery, Johns Hopkins University School of Medicine, Baltimore, Md.

"Diagnosis of Diverticulosis and Diverticulitis."

Dr. James T. Case, Professor of Roentgenology, Northwestern University Medical School and Battle Creek Sanitarium, Battle Creek, Mich.

"Some Principles of Intestinal Surgery with Especial Reference to the Physiology of the Intestines."

Dr. J. Shelton Horsley, Richmond, Va.

"The Clinical Aspect of Congenital Mesenteric Malformation in Children."

Mr. George E. Waugh, M. D., F.R.C.S., Senior Surgeon, Hampstead General and N. W. London Hospitals; Consulting Surgeon, Hospital for Sick Children; London, England.

"Chronic Appendicitis."

Dr. John B. Deaver, Emeritus, Professor of Surgery, University of Pennsylvania School of Medicine, Philadelphia, Pa.

"Cancer of the Colon."

Mr. Charles J. MacAuley, F.R.C.S., Surgeon to St. Mary's and Master Misericordiae Hospitals, Lecturer in Anatomy, University College, Dublin, Ireland.

Dinner Intermission

Symposium on Gastro-Intestinal Diseases, Continued
 "Mucous Colitis."

Dr. Walter A. Bastedo, Assistant Clinical Professor of Medicine, Columbia University College of Physicians and Surgeons, New York, N. Y.

"Malignancy of the Large Intestine."

Dr. John F. Erdmann, Professor of Surgery, New York Post Graduate Medical School, New York, N. Y.

Address.

Dr. James S. McLester, Professor of Medicine, University of Alabama School of Medicine, Birmingham, Ala.

"Observation on the Functioning Human Breast."

Dr. Laurence R. DeBuys, Professor of Pediatrics, Tulane University of Louisiana School of Medicine, New Orleans, La.

"A General Consideration of Cesarean Section."

Dr. C. Jeff Miller, Professor of Obstetrics and Clinical Gynecology, Tulane University of Louisiana School of Medicine, New Orleans, La.

Address.

Sir James Dundas-Grant, K.B.E., London, England.

"Causative Factors of Mental Disorder with Special Reference to Heredity."

Dr. Percy T. Hughes, Lecturer and Examiner in Mental Diseases, University of Birmingham Medical Department, Bromsgrove, Worcester, England.

TUESDAY, OCTOBER 16TH

Diagnostic Clinic.

Dr. Frederick W. Marlow, Associate Professor of Gynecology, University of Toronto Faculty of Medicine, Toronto, Canada.

Diagnostic Clinic.

Dr. John O. Polak, Professor of Obstetrics and Gynecology, Long Island College Hospital, Brooklyn, N. Y.

Diagnostic Clinic.

Dr. Hugh H. Cabot, Dean and Professor of Surgery, University of Michigan Medical School, Ann Arbor, Michigan.

Intermission for Review of Exhibits

Diagnostic Clinic.

Dr. John B. Deaver, Emeritus, Professor of Surgery, University of Pennsylvania School of Medicine, Philadelphia, Pa.

Diagnostic Clinic.

Dr. Wm. E. Lower, Professor of Genito-Urinary Surgery, Western Reserve University School of Medicine, Director of Cleveland Clinic, Cleveland, Ohio.

Diagnostic Clinic.

Dr. William B. Coley, Professor of Clinical Cancer Research, Memorial Hospital, Cornell University Medical College, New York, N. Y.

Noon Intermission

Diagnostic Clinic.

Dr. Porter P. Vinson, Mayo Clinic, Rochester, Minn.
Symposium on Malignant Diseases

"The Importance of Return to the Principles of Halsted's Complete Operation for Cancer of the Breast."

Dr. Joseph Colt Bloodgood, Associate Professor of Clinical Surgery, Johns Hopkins University School of Medicine, Baltimore, Md.

"Diagnosis, Prognosis and End-Results of Bone Sarcoma."

Dr. William B. Coley, Professor of Clinical Cancer Research, Memorial Hospital, Cornell University Medical College, New York, N. Y.

Intermission for Review of Exhibits

Symposium on Diseases of the Genito-Urinary Tract

"Relation of Urologic Diseases to Internal Medicine."

Dr. Harvey G. Beck, Professor of Clinical Medicine, University of Maryland School of Medicine and College of Physicians and Surgeons, Baltimore, Maryland.

"Genito-Urinary Tuberculosis."

Dr. Hugh H. Young, Clinical Professor of Urology, Johns Hopkins University School of Medicine, Baltimore, Md.

"Surgery of the Ureters."

Dr. Wm. E. Lower, Professor of Genito-Urinary Surgery, Western Reserve University School of Medicine, Director of Cleveland Clinic, Cleveland, Ohio.

"A Consideration of Newer Diagnostic and Surgical Procedures in the Bladder and Posterior Urethra."

Dr. J. F. McCarthy, Director, Department of Urology, New York Post Graduate Medical School and Hospital; Associate Professor of Urology, Columbia University College of Physicians and Surgeons, New York, N. Y.

"Some Problems of Pyelitis in Children."

Dr. James Hugh Thursfield, F.R.C.P., Physician to St. Bartholomew's Hospital; Physician to Hospital for Sick Children, London, England.

"Diseases of the Kidneys."

Dr. Verne C. Hunt, Associate Professor of Surgery, University of Minnesota Medical School, Mayo Clinic, Rochester, Minn.

"Evolution in the Treatment and Hospitalization of the Sick from the 14th and 15th Centuries to the Present Time." (From the Archives of the old Hotel Dieu of Paris.)

Dr. Edmund L. Gros, President of the Medical Board and Chief of the Medical Staff, The American Hospital of Paris, Paris, France.

Dinner Intermission

Symposium on Diseases of the Genito-Urinary Tract, Continued

"Some Considerations Relative to Congenital Deformity of the Lower Genito-Urinary Tract."

Mr. A. Ralph Thompson, F.R.C.S., L.R.C.P., Surgeon Genito-Urinary Department, Guy's Hospital, Surgeon, Victoria Hospital for Children and East London Hospital for Children, London, England.

Symposium on Gynecology

"Significance of Chronic Pelvic Pain in Women."

Dr. Frederick W. Marlow, Associate Professor of Gynecology, University of Toronto Faculty of Medicine, Toronto, Canada.

"Surgical Complications of Pregnancy."

Dr. John O. Polak, Professor of Obstetrics and Gynecology, Long Island Cottage Hospital, Brooklyn, N. Y.

"Fundal Hysterectomy."

Dr. O. Beuttner, Professor of Obstetrics and Gynecology, Medical Department, University of Geneva, Geneva, Switzerland.

"Mind—Man's Most Distinctive Organ."

Dr. William A. White, Professor of Psychology and Clinical Professor of Neurology, George Washington University Medical School; Professor Mental and Nervous Diseases, Georgetown University School of Medicine, Washington, D. C.

"Mucosal Irritability and Its Significance."

Mr. William Ibbotson, F.R.C.S., L.R.C.R., Hon. Surgeon Ear, Nose and Throat Department, Prince of Wales Hospital; Physician to Ear and Throat Department, St. Thomas' Hospital and London Throat Hospital, London, England.

WEDNESDAY, OCTOBER 17TH

Diagnostic Clinic.

Dr. Harlow Brooks, Professor of Clinical Medicine, University and Bellevue Hospital Medical College, New York, N. Y.

Diagnostic Clinic.

Dr. William D. Haggard, Professor of Clinical Surgery, Vanderbilt University School of Medicine, Nashville, Tenn.

Diagnostic Clinic.

Dr. Verne C. Hunt, Associate Professor of Surgery, University of Minnesota Medical School, Mayo Clinic, Rochester, Minn.

Intermission for Review of Exhibits

Diagnostic Clinic.

Dr. Carl A. Hamann, Dean and Professor of Applied Anatomy and Clinical Surgery, Western Reserve University School of Medicine, Cleveland, Ohio.

Diagnostic Clinic.

Dr. Walter E. Dandy, Associate Professor of Clinical Surgery, Johns Hopkins University School of Medicine, Baltimore, Md.

Diagnostic Clinic.

Dr. Elliott P. Joslin, Clinical Professor of Medicine, Harvard University Medical School, Boston, Mass.

Noon Intermission

"Echinococcus Cysts of the Liver Passing into the Bile Ducts."

Dr. Daniel J. Cranwell, Professor of Surgical Pathology, National University of Buenos Aires, Buenos Aires, Argentina.

"The Nature of Disease."

Mr. James E. McDonagh, F.R.C.S., L.R.C.P., Dermatologist, London County War Hospital. Physician to Skin Hospital (Blackfriars) and Skin Departments, St. Bartholomew's and West London Hospitals, London, England.

"The Emergency Function of the Spleen."

Dr. Walter B. Cannon, Professor of Physiology, Harvard University Medical School, Boston, Mass.

"Choice of Anesthetic Methods with Relation to (1) Age of Patient; (2) Location of Disease; (3) General Condition of Patient."

Dr. Hugh H. Cabot, Dean and Professor of Surgery, University of Michigan Medical School, Ann Arbor, Michigan.

"Surgical Treatment for Auricular Fibrillation Occurring in Toxic Goiter."

Mr. Thomas P. Dunhill, M.D., C.M.G., F.R.C.S., Associate Director of Surgery and Surgeon to St. Bartholomew's Hospital, Member of Council of British Medical Association, London, England.

Intermission for Review of Exhibits

Symposium on Diseases of the Respiratory System

"Surgical Treatment of Abscess of the Lung."

Dr. George P. Muller, Professor of Clinical Surgery, University of Pennsylvania School of Medicine, Philadelphia, Pa.

"The Value of the Heavy Metals in the Treatment of Tuberculosis."

Dr. Lancelot S. T. Burrell, Physician to Hospital for Diseases of Chest, Brompton and Royal Free Hospital, London. Consulting physician to St. Dusan's Tubercular Hospital, Cambridge, and King Edwards VII Sanitarium at Midhurst, London, England.

"The Treatment of Tubercular Empyema."

Dr. William L. Keller, Lieutenant Colonel Medical Corps, U. S. Army, Walter Reed General Hospital, Washington, D. C.

"Phrenico-Exorexis and Thoracoplasty in the Treatment of Pulmonary Tuberculosis."

Dr. Carl A. Hedblom, Professor of Surgery, University of Illinois College of Medicine, Chicago, Illinois.

"The Significance of Chronic Hoarseness in Adults."

Dr. Justin M. Waugh, Cleveland Clinic, Cleveland, Ohio.

"Anaphylaxis."

Professor Leonard S. Dudgeon, C.M.G., C.B.E., F.R.C.P., Professor and Examiner in Pathology, University of London; Director of Department of Pathology, St. Thomas' Hospital, Examiner in Pathology, University of Cambridge, London, England.

Dinner Intermission

PUBLIC MEETING

"Poliomyelitis."

Dr. Wardner D. Ayer, Assistant Professor of Neurological Pathology and Clinical Medicine, Syracuse University College of Medicine, Syracuse, N. Y.

"Diabetes in Children."

Dr. Elliott P. Joslin, Clinical Professor of Medicine, Harvard University Medical School, Boston, Mass.

"Pneumonia."

Dr. Harlow Brooks, Professor of Clinical Medicine, University and Bellevue Hospital Medical College, New York, N. Y.

Address

Dr. William D. Haggard, Professor of Clinical Surgery, Vanderbilt University School of Medicine, Nashville, Tenn.

THURSDAY, OCTOBER 18TH

Diagnostic Clinic.

Dr. Charles A. Elliott, Professor of Internal Medicine, Northwestern University Medical School, Chicago, Ill.

Diagnostic Clinic.

Dr. Arthur Dean Bevan, Clinical Professor of Surgery and Head of Surgical Department, Rush Medical College, Chicago, Ill.

Diagnostic Clinic.

Dr. Charles H. Frazier, John Rhea Barton, Professor of Surgery, University of Pennsylvania School of Medicine, Philadelphia, Pa.

Intermission for Review of Exhibits

Diagnostic Clinic.

Dr. Frank H. Lahey, Director Lahey Clinic, Boston, Mass.

"The Differential Diagnosis of 'Referred' from true Abdominal Pain."

Mr. Farquhar Macrae, F.R.C.S., Lecturer on Clinical Surgery, University of Glasgow; Examiner in Surgery, University of Edinburgh, Glasgow, Scotland.

"The Effects of Intestinal Protozoa."

Dr. Kenneth M. Lynch, Professor of Pathology, Medical College of the State of South Carolina, Charleston, S. C.

"Pellagra of Today."

Dr. Stewart R. Roberts, Professor of Clinical Medicine, Emory University School of Medicine, Atlanta, Ga.

Noon Intermission

Symposium on Diseases of the Gall-Bladder and Liver

Diagnostic Clinic and Address on "Experimental Cirrhosis of the Liver."

Dr. J. L. Bollman and *Dr. A. M. Snell*, Mayo Clinic, Rochester, Minn.

"Some Complications After Gall-Bladder Operations."

Dr. Carl A. Hamann, Dean and Professor of Applied Anatomy and Clinical Surgery, Western Reserve University School of Medicine, Cleveland, Ohio.

"Surgical Lesions of the Common and Hepatic Ducts."

Dr. Frank H. Lahey, Director Lahey Clinic, Boston, Mass.

Intermission for Review of Exhibits

"Glaucoma—Our Surgical Resources for Its Relief."

Dr. L. Webster Fox, The Joseph Schneider Foundation Presentation, Professor of Ophthalmology, University of Pennsylvania Graduate School of Medicine, Philadelphia, Pa.

Symposium on Diseases of the Brain and Central Nervous System

"Surgical Treatment of Trigeminal Neuralgia."

Dr. Charles H. Frazier, John Rhea Barton, Professor of Surgery, University of Pennsylvania School of Medicine, Philadelphia, Pa.

"Localization of Brain Tumors."

Dr. Howard C. Naffziger, Clinical Professor of Surgery, University of California Medical School, San Francisco, Calif.

"The Diagnosis and Treatment of Spinal Cord Tumors."

Dr. Walter E. Dandy, Associate Professor of Clinical Surgery, Johns Hopkins University School of Medicine, Baltimore, Md.

"Surgery of the Spleen."

Dr. Arthur Dean Bevan, Clinical Professor of Surgery and Head of Surgical Department, Rush Medical College, Chicago, Ill.

"A Useful Syndrome in the Clinical Recognition of the Syphilitic."

Dr. Walter W. Graves, Professor of Neurology and Psychiatry, St. Louis University School of Medicine, St. Louis, Mo.

"Deviations from the Standard."

Dr. Otto F. Leyton, F.R.C.P., Physician to London Hospital; Lecturer on Pharmacology at the London Hospital Medical School; Clinical Pathologist to King's College Hospital, London, England.

Dinner Intermission

"Errors of Migration of the Human Testis—Causes and Effects."

Mr. J. Howell Evans, M.D., F.R.C.S., Examiner in Surgery, University of Oxford; Consulting Surgeon, Walton, Wimbledon and Cancer Hospitals, London, England.

Address.

Dr. Charles A. Elliott, Professor of Internal Medicine, Northwestern University Medical School, Chicago, Ill.

"Skin Grafting by the Whole-Skin Method."

Mr. Archibald Young, F.R.C.S., Regius Professor of Surgery, University of Glasgow, Glasgow, Scotland.

"Clinical Significance of Albuminuria."

Dr. Jack Witherspoon, Associate Professor of Clinical Medicine, Vanderbilt University School of Medicine, Nashville, Tenn.

Address:

Dr. Morris Roch, Professor of Clinical Medicine, University of Geneva Medical School, Geneva Switzerland.

Address.

Dr. Donald Core, F.R.C.P., Professor of Neurology, University of Manchester, Manchester, England.

FRIDAY, OCTOBER 19TH

Diagnostic Clinic.

Dr. Lewellys F. Barker, Professor Emeritus of Medicine, Johns Hopkins University School of Medicine, Baltimore, Md.

Diagnostic Clinic.

Dr. Dean D. Lewis, Professor of Surgery, Johns Hopkins University School of Medicine, Baltimore, Md.

Intermission for Review of Exhibits

Diagnostic Clinic.

Dr. John Phillips, Assistant Professor of Therapeutics, Western Reserve University School of Medicine, Cleveland, Ohio; Director of Cleveland Clinic, Cleveland, Ohio.

Diagnostic Clinic.

Dr. George W. Crile, Professor Emeritus of Surgery, Western Reserve University School of Medicine, Cleveland, Ohio; Director of Cleveland Clinic, Cleveland, Ohio.

Symposium on Diseases of the Heart and Circulatory System

"Cardiolysis for Chronic Mediatinopericarditis."

Dr. Elsworth S. Smith, Professor of Clinical Medicine, Washington University School of Medicine, St. Louis, Mo.

"Classification of Hypertension."

Dr. James B. McElroy, Professor of Medicine, University of Tennessee College of Medicine, Memphis, Tenn.

Noon Intermission

"The Myocardium in the Acute Infections."

Dr. Harlow Brooks, Professor of Clinical Medicine, University and Bellevue Hospital Medical College, New York, N. Y.

"Cardiovascular Syphilis."

Dr. Aldred S. Warthin, Professor of Pathology, University of Michigan Medical School, Ann Arbor, Mich.

"Coronary Thrombosis."

Dr. John Phillips, Assistant Professor of Therapeutics, Western Reserve University School of Medicine, Cleveland, Ohio; Director of Cleveland Clinic, Cleveland, Ohio.

Address.

Mr. Louis L. Cassidy, F.R.C.S.I., Gynecologist to The Royal City of Dublin Hospital; Examiner in Midwifery and Gynecology, University of Dublin and Master of Coombe Hospital (Dublin, Ireland).

"Acute Osteomyelitis."

Dr. Dean D. Lewis, Professor of Surgery, Johns Hopkins University School of Medicine, Baltimore, Maryland.

Address.

Sir Farquhar Buzzard, K.C.V.O., Regius Professor of Medicine, University of Oxford, Oxford, England.

Address.

Dr. George W. Crile, Professor Emeritus of Surgery, Western Reserve University School of Medicine, Cleveland, Ohio; Director of Cleveland Clinic, Cleveland, Ohio.

"The Spastic Colon and Its Concomitants."

Dr. Lewellys F. Barker, Professor Emeritus of Medicine, Johns Hopkins University School of Medicine, Baltimore, Md.

"Cause and Treatment of Peptic Ulcer."

Dr. Charles H. Mayo, Professor of Surgery, University of Minnesota School of Medicine and Graduate School of Medicine, Mayo Clinic, Rochester, Minn.

The following distinguished foreign guests have accepted to take part on the program, but have not as yet sent in the titles of their contributions:

Dr. James Haig Ferguson, Lecturer in Clinical Gynecology and Clinical Medicine, University of Edinburgh, Edinburgh, Scotland.

Dr. George E. Nesbitt, Prof. of Medicine, Royal College of Surgeons, Ireland, Dublin, Ireland.

RESERVE SPEAKERS

Address.

Dr. George V. I. Brown, F.A.C.S., Professor of Plastic Surgery, University of Wisconsin, Milwaukee, Wis.

Diagnostic Clinic, Surgical.

Dr. T. C. Davison, Atlanta, Ga.

Diagnostic Clinic, Medical.

Dr. J. E. Paullin, Professor of Clinical Medicine, Emory University School of Medicine, Atlanta, Ga.

Diagnostic Clinic, Medical.

Dr. E. C. Thrash, Atlanta, Ga.

BANQUET

FRIDAY, EVENING, OCTOBER 19TH

Addresses by Distinguished Citizens of the World.

MEDICAL ASSOCIATION OF GEORGIA

Office

ATLANTA, GEORGIA

FINANCIAL STATEMENT

| | |
|---------------------------------|-------------|
| Balance in Bank May 1, 1927 | \$ 5,736.72 |
| Total Receipts from all sources | 14,667.55 |

| | |
|---------------------------|-------------|
| Total to be accounted for | \$20,404.27 |
|---------------------------|-------------|

| | |
|------------------------------|-------------|
| Balance in Bank, May 1, 1928 | \$ 4,720.57 |
|------------------------------|-------------|

| | |
|---|-----------|
| Total expenditures from May 1, 1927 to April 30, 1928 | 15,683.70 |
|---|-----------|

| | |
|---------------------------|-------------|
| Total to be accounted for | \$20,404.27 |
|---------------------------|-------------|

INCOME

Classified

| | |
|-------------------------------------|-------------------|
| Membership | \$8,136.75 |
| Advertising | 6,071.09 |
| Exhibits at Athens | 350.00 |
| Subscriptions | 19.00 |
| Collected on cuts for illustrations | 90.71—\$14,667.55 |

DISBURSEMENTS

| No. | Description | Amount |
|------|---|----------|
| 834— | Bryan & Middlebrooks. Attys., Attorney's fee for W. H. Wilson, Atty., Waycross in suit of Dr. W. M. Folks vs. Thigpen | \$ 50.00 |
| 835— | H. L. Rowe: Operating graphotype and addressograph machines for months of January, February, March and April, 1927 | 57.75 |
| 836— | Allen H. Bunce, M.D.: Salary as Secretary-Treasurer for April, 1927 | 150.00 |
| 837— | H. L. Rowe: Salary as Executive Secretary for April, 1927 | 150.00 |
| 838— | Lyon-Young Printing Co: Printing and mailing 1,900 copies of the April issue of Journal | \$459.68 |
| | Enclosing | 5.70 |

| | | | | |
|--------------------------------------|--------|--------|-------------------------------------|--------|
| Mortising 3 electros | 1.70 | 467.08 | 854—H. L. Rowe: | |
| 839—J. N. Reisman: | | | Salary as Executive Secretary for | |
| Rent for May, 1927 | 21.50 | | May, 1927 | 175.00 |
| 840—Southern Press Clipping Bureau: | | | 855—Lyon-Young Printing Co.: | |
| News clippings for April, 1927.... | 5.00 | | Printing and mailing 1,900 copies | |
| 841—Benj. F. Stovall: | | | of the May issue of Journal, | |
| Multigraphing letters to physicians | | | \$465.38; 400 copies of program, | |
| on program, prospective exhibitors, | | | \$45.00 | 510.38 |
| members of House of Delegates, | | | 856—The Lilly Company: | |
| place and date of first meeting of | | | 400 badges for annual session and | |
| House of Delegates | 12.15 | | 179 ribbons for Woman's Auxil- | |
| 842—E. K. Large, Postmaster: | | | lary | 54.23 |
| Postage | 30.00 | | 857—Southern Press Clipping Bureau: | |
| 843—E. C. Thrash, M. D.: | | | News clippings for May, 1927.... | 5.00 |
| Expenses as Delegate to the Amer- | | | 858—J. N. Reisman: | |
| ican Medical Association annual | | | Rent for June, 1927 | 21.50 |
| session, May 17, 18, 19, 20, | | | 859—Auld's, Inc., Columbus, Ohio: | |
| 1927, at Washington, D. C. .. | 100.00 | | Badge of Service for President, | |
| 844—C. W. Roberts, M.D.: | | | 1926-1927 | 3.34 |
| Expenses as Delegate to the Amer- | | | 860—Lester Book & Stationery Co.: | |
| ican Medical Association annual | | | Wrapping paper, twine, registra- | |
| session, May 17, 18, 19, 20, | | | tion book, 5,000 second sheets.... | 4.30 |
| 1927, at Washington, D. C. | 100.00 | | 861—American Medical Association: | |
| 845—Allen H. Bunce, M.D.: | | | One copy Tenth Edition, American | |
| Expenses as Delegate to the Amer- | | | Medical Directory | 12.00 |
| ican Medical Association annual ses- | | | 862—Crucedale, Florist, Athens: | |
| sion 1927, at Washington, D. C. | 100.00 | | Cut flowers for Miss Long and | |
| 846—Miss M. J. Maloney, Reporter: | | | Mrs. Francis Long Taylor, Athens | 6.00 |
| Cash paid on account for reporting | | | 863—Briarcliff Flower Shop: | |
| annual session of Association at | | | Basket of flowers for Dr. M. M. | |
| Athens, May 11, 12, 13, 1927 | 100.00 | | Head, Councilor, sent to Wesley | |
| 847—Georgian Hotel, Athens: | | | Memorial Hospital, Emory Univer- | |
| Electrical current for exhibitors at | | | sity | 10.00 |
| the annual session of Association in | | | 864—Bryan & Middlebrooks, Attys.: | |
| Georgian Hotel, May 11, 12, 13, | | | Balance prorata part of fee for at- | |
| 1927 | 21.00 | | torneys in suit of Dr. G. C. Mizell | |
| 848—V. O. Harvard, M.D.: | | | vs. Friedman | 25.00 |
| Honorarium for President, fiscal | | | 865—Dr. M. M. Head, Councilor: | |
| year ending May 13, 1927.... | 150.00 | | Expenses incurred as Councilor | |
| 849—Bryan & Middlebrooks, Attys.: | | | from June 5, 1926, to June 22, | |
| Expenses of Mr. Dunaway, Atty. to | | | 1927 | 23.02 |
| Wrightsville, suit of Dr. W. C. | | | 866—Dr. G. Y. Moore: | |
| Kellogg vs. J. G. Nasworthy | 19.94 | | Expenses incurred as Councilor.... | 26.50 |
| 850—Dr. Charles A. Greer: | | | 867—E. K. Large, Postmaster: | |
| Expenses incurred as Councilor, | | | Postage | 30.00 |
| Third District, for fiscal year end- | | | 868—Allen H. Bunce, M.D.: | |
| ing April 30, 1927 | 25.50 | | Salary as Secretary-Treasurer for | |
| 851—H. L. Rowe: | | | June, 1927 | 150.00 |
| Expenses attending annual session | | | 869—H. L. Rowe: | |
| of Association at Athens, May 9, | | | Salary as Executive Secretary for | |
| 10, 11, 12, 13, 1927. Renting | | | June, 1927 | 175.00 |
| tables and chairs for exhibitors, | | | 870—Lyon-Young Printing Co.: | |
| telegrams, janitor, decorating, | | | Printing and mailing 1,725 copies | |
| painting sign, drayage, etc. | 50.00 | | of June issue of Journal | 445.40 |
| 852—Cash: | | | 871—J. P. Stevens Engraving Co.: | |
| Paid for telegrams for fiscal year | | | 1,000 Letterheads and envelopes | |
| ending April 30, 1927 | 3.60 | | for President, Dr. W. A. Mulherin | 32.80 |
| 853—Allen H. Bunce, M.D.: | | | 872—Lester Book & Stationery Co.: | |
| Salary as Secretary-Treasurer for | | | Wrapping paper and twine | 1.30 |
| May, 1927 | 150.00 | | 873—Art Sign Co.: | |

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| Lettering door "Medical Association of Georgia" | 2.70 | of Association reference to Basic Science Bill, 200 copies of bill, cards sent to delinquent members | 22.35 |
| 874—J. N. Reisman: | | 891—American Writing Machine Co.: Repairs on typewriter and new ribbon | 1.75 |
| Rent for July, 1927 | 21.50 | 892—Bryan & Middlebrooks, Attys.: Fee for H. W. Wilson, Atty., in suit of Marion Higgs vs. Dr. W. M. Folks | 100.00 |
| 875—Russell Electric Co.: Moving house phone from room 108 to 205 | 17.85 | 893—Illinois Medical Journal: Medical History of Illinois | 10.00 |
| 876—Southern Engraving Co.: Cuts for papers of Drs. Dan C. Elkin, W. Randolph Smith, and J. W. Landham | 78.30 | 894—J. N. Reisman: Rent for August, 1927 | 21.50 |
| 877—Southern Press Clipping Bureau: News clipping for June, 1927 | 5.00 | 895—Lyon-Young Printing Co.: Printing and mailing 1,725 copies of July issue of Journal | 445.40 |
| 878—Ruth I. Hill & Co.: Writing six copies of bills as order by Dr. S. J. Lewis, Councilor | 3.50 | 896—Dr. C. K. Sharp: Expenses incurred as Councilor to July 29, 1927 | 13.25 |
| 879—Dr. C. L. Ayers: Expenses incurred as Councilor from March 8 to June 22, 1927 | 17.27 | 897—Southern Press Clipping Bureau: News clippings for July, 1927 | 5.00 |
| 880—Dr. S. J. Lewis: Expenses incurred attending meeting at Atlanta on June 22, 1927 | 20.45 | 898—The Fulton Printing Co.: 2,500 Letterheads and 2,500 envelopes for Councilors | 23.50 |
| 881—Dr. William H. Myers: Expenses incurred attending meeting at Atlanta on June 22, 1927 | 28.40 | 899—E. K. Large, Postmaster: Postage for mailing Journal | 18.35 |
| 882—Benjamin F. Stovall: Multigraphing letters, Re: Dr. W. A. Mulherin, President, visits to County and District Society meetings | 11.75 | 900—Dr. G. Y. Moore: Expenses incurred as Councilor | 26.50 |
| 883—Mrs. Irene H. Snyder: Balance account for reporting and furnishing transcript with carbon copy of the proceedings of the House of Delegates, Council, and general meetings, annual session of Association, Athens, May 11, 12, 13, 1927 | 316.55 | 901—The C. A. Dahl Company: Wreath of flowers for Dr. T. C. Thompson, sent by Association, \$15; Wreath of flowers for Dr. T. C. Thompson, sent by Councilors, \$15; express charges, \$1 | 31.00 |
| 884—E. K. Large, Postmaster: Postage for mailing letters for the Committee on Public Policy and Legislation | 30.00 | 902—E. K. Large, Postmaster: Postage | 30.00 |
| 885—E. K. Large, Postmaster: Deposit for postage to mail Journal | 15.00 | 903—Bryan & Middlebrooks, Attys.: Amount paid Mr. B. J. Fowler for services rendered in connection with Basic Science Bill | 100.00 |
| 886—Dr. M. M. McCord: Expenses incurred as Councilor for Seventh District from January 1, to August 1, 1927 | 15.00 | 904—Georgian Hotel, Athens: Expenses of invited guest, Dr. E. A. Hines, Seneca, S. C. | 3.00 |
| 887—Allen H. Bunce, M.D.: Salary as Secretary-Treasurer for July, 1927 | 150.00 | 905—Dr. W. A. Mulherin, President: Advance on honorarium for 1927-1928 | 50.00 |
| 888—H. L. Rowe: Salary as Secretary-Treasurer for July, 1927 | 175.00 | 906—Dr. J. T. Colvin: Telegrams sent to members of legislature | 1.75 |
| 889—Southern Engraving Co.: Cut for illustration in Advertisement | 4.83 | 907—Dr. Stewart D. Brown: Expenses incurred as Councilor for July and August, 1927 | 20.00 |
| 890—Benjamin F. Stovall: Multigraphing letters to members | | 908—Allen H. Bunce, M.D.: Salary as Secretary-Treasurer for August, 1927 | 150.00 |
| | | 909—H. L. Rowe: Salary as Executive Secretary for August, 1927 | 175.00 |

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| 910—Dr. William H. Myers: Telegrams sent to members of legislature from Savannah | 9.91 | 926—Southern Bell Telephone & Telegraph Co.: Long distance telephone toll for August, 1927, for Committee on Public Policy and Legislation | 34.65 |
| 911—E. K. Large, Postmaster: Postage for mailing letters to members of Association from Committee on Public Policy and Legislation | 30.00 | 927—Dr. C. L. Ayers: Expenses incurred for Committee on Public Policy and Legislation | 11.75 |
| 912—E. K. Large, Postmaster: Postage for mailing letters for Committee on Public Policy and Legislation and usual routine of business for the Association | 30.00 | 928—Dr. John M. Anderson: Telegrams and other expenses incurred for Committee On Public Policy & Legislation | 14.40 |
| 913—Dr. Irvine Phinizy: Telegrams sent from Augusta to members of legislature | 2.95 | 929—Dr. M. M. McCord: Expenses incurred as Councilor and for Committee on Public Policy and Legislation | 18.29 |
| 914—Dr. A. J. Mooney: Telegrams sent to members of legislature | 1.50 | 930—Dr. W. A. Mulherin, President: Payment on honorarium for 1927-1928 | 25.00 |
| 915—Mrs. F. W. Goodroe: Balance on work of operating graphotype and addressograph machines for 1926, December | 15.00 | 931—Allen H. Bunce, M.D.: Salary as Secretary-Treasurer for September, 1927 | 150.00 |
| 916—Dr. A. S. M. Coleman: Expenses incurred as Councilor for years 1925-1926 and to August, 1927 | 125.00 | 932—H. L. Rowe: Salary as Executive Secretary for September, 1927 | 175.00 |
| 917—Dr. William H. Myers: Expenses incurred as Councilor attending meeting held in Atlanta, August 2, 1927 | 30.25 | 933—Lyons-Young Printing Co.: Printing and mailing the September issue of Journal | 457.60 |
| 918—J. N. Reisman: Rent for September, 1927 | 21.50 | 934—Benjamin F. Stovall: Multigraphing for Committee on Public Policy and Legislation and cards to be sent to delinquent members | 14.50 |
| 919—Atlanta Envelope Co.: 25,800 envelopes for mailing Journal | 122.55 | 935—Lester Book & Stationery Co.: 2M Sheets paper, Gem clips, used for Committee on Medical History, \$8.30; 150-page Journal for registering members with index, \$2.90 | 11.20 |
| 920—Lester Book & Stationery Co.: Rubber bands, gem clips, pencils and typewriter ribbon | 4.50 | 936—Southern Press Clipping Bureau: News clipping for September, 1927 | 5.00 |
| 921—Lyons-Young Printing Co.: Printing and mailing 1,760 copies of the August issue of the Journal and reprints for Dr. E. A. Hines | 472.74 | 937—Southern Engraving Co.: Copper plates for illustrations | 21.70 |
| 922—Massachusetts Bonding & Insurance Co.: Premium on bond for Secretary-Treasurer from April 1, 1927, to April 1, 1928 | 7.50 | 938—E. K. Large, Postmaster: Postage | 30.00 |
| 923—Southern Press Clipping Bureau: News clippings for August, 1927 | 5.00 | 939—(Check for \$3.68 outstanding.) | |
| 924—Dr. Charles E. Waits: Postage, telegrams, telephone, stenographer and multigraphing for Committee on Public Policy and Legislation | 25.62 | 940—J. N. Reisman: Rent for October, 1927 | 21.50 |
| 925—Western Union Telegraph Co.: Telegraph account for August, 1927, wires sent for Committee on Public Policy and Legislation | 43.08 | 941—E. K. Large, Postmaster: Postage and envelopes for Abner Calhoun Lectureship Committee | 37.76 |
| | | 942—Allen H. Bunce, M.D.: Salary as Secretary-Treasurer for October, 1927 | 150.00 |
| | | 943—H. L. Rowe: Salary as Executive Secretary for October, 1927 | 175.00 |
| | | 944—E. K. Large, Postmaster: Deposit for mailing Journal | 16.21 |
| | | 945—E. K. Large, Postmaster: Postage | 30.00 |

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| 946—J. N. Reisman: Rent for November, 1927 | 21.50 | 964—Allen H. Bunce, M.D.: Salary as Secretary-Treasurer for December, 1927 | 150.00 |
| 947—Lyon-Young Printing Co.: Printing and mailing 1,825 copies of October issue of Journal and re- prints for Calhoun Lectureship Committee | 466.60 | 965—H. L. Rowe: Salary as Executive Secretary for December, 1927 | 175.00 |
| 948—Adressograph Co.: 500 B. Alloy plates | 1.68 | 966—E. K. Large, Postmaster: Postage | 30.00 |
| 949—Southern Press Clipping Bureau: News clippings for October, 1927 | 5.00 | 967—Miss Annie Jacks: Commission on ad of James' Phar- macy | 4.00 |
| 950—Benjamin F. Stovall: Cards to delinquent members, let- ters to ex-presidents in reference to Medical History and letters for Cal- houn Lectureship Committee | 28.80 | 968—Lyon-Young Printing Co.: Printing and mailing 1,900 copies of the December issue of the Jour- nal | 469.68 |
| 951—Bryan & Middlebrooks, Attys.: One-half cost reporting trial of case S. H. Dudley vs. Dr. J. C. Blalock | 22.50 | 969—Benjamin F. Stovall: Multigraphing cards to delinquent members, letters to Councilors and county secretaries in reference to Medical History; letters for Presi- dent, Dr. W. A. Mulherin | 16.00 |
| 952—Allen H. Bunce, M.D.: Salary as Secretary-Treasurer for November, 1927 | 150.00 | 970—Lester Book & Stationery Co.: Typewriter ribbon and gem clips | 1.15 |
| 953—H. L. Rowe: Salary as Executive Secretary for November, 1927 | 175.00 | 971—J. N. Reisman: Rent for January, 1928 | 21.50 |
| 954—E. K. Large, Postmaster: Postage | 30.00 | 972—Southern Press Clipping Bureau: News clipping for December, 1927 | 5.00 |
| 955—W. A. Williams, M.D., Secretary Bibb County Medical Society: Refund for overpayment of mem- bers reported | 2.00 | 973—Southern Engraving Co.: Cut of seal of Association for printing charters | 2.14 |
| 956—Lyon-Young Printing Co.: Printing and mailing 1,850 copies of November issue of Journal | 473.88 | 974—Allen H. Bunce, M.D.: Salary as Secretary-Treasurer for January, 1928 | 150.00 |
| 957—The Fulton Printing Co.: 2,000 Membership cards for 1928 | 24.50 | 975—H. L. Rowe: Salary as Executive Secretary for January, 1928 | 175.00 |
| 958—Southern Engraving Co.: Copper head plates for illustra- tions | 21.75 | 976—Bryan & Middlebrooks, Attys.: Retainer fee as attorney for Asso- ciation for 1928 | 1,250.00 |
| 959—J. N. Reisman: Rent for December, 1927 | 21.50 | 977—Bryan & Middlebrooks, Attys.: Preparing bills which were intro- duced in the General Assembly of Georgia during the session of 1927 and attending hearings before com- mittees of the legislature and giv- ing advice from time to time | 350.00 |
| 960—Southern Press Clipping Bureau: News clipping for November, 1927 | 5.00 | 978—Bryan & Middlebrooks, Attys.: Telephone toll in reference to suit of Mrs. Jewell McDaniel vs. Dr. M. B. Allen | 4.45 |
| 961—Bryan & Middlebrooks, Attys.: Attorney's fee for L. J. Steele in suit of William J. Perry vs. Dr. F. G. Hodgson | 250.00 | 979—E. K. Large, Postmaster: Postage | 30.00 |
| 962—Bryan & Middlebrooks, Attys.: Attorney's fee for H. G. Vandiver, Attorney, for representing Drs. N. J. and Grady Coker in suit of Mrs. A. M. Anderson vs. Drs. N. J. and Grady Coker, \$50; Stenographic work, \$9; expenses to Canton, \$5.10 | 64.10 | 980—Lyon-Young Printing Co.: Printing and mailing 1,950 copies of January issue of Journal, enclos- ing, one mortise and tipping in- sert | 543.21 |
| 963—Bryan & Middlebrooks, Attys.: Expenses in suit, Jewell McDaniel vs. Dr. M. B. Allen (court re- porter), \$21.92; expenses to Gainesville, \$4.50; expenses to Jef- ferson, \$10.25 | 36.67 | 981—E. K. Large, Postmaster: Postage for mailing Journal | 22.43 |
| | | 982—Southern Engraving Co.: | |

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| Photographic cut of Dr. L. M. Johnson, deceased, and cuts for illustrations | 9.32 | visection in the District of Columbia | 6.00 |
| 983—Paragon Box Co.: 100 Mailing tubes for sending out charters | 7.50 | 996—Southern Press Clipping Bureau: News clippings for February, 1928 | 5.00 |
| 984—Benjamin F. Stovall: Multigraphing letters for chairman of Committee on Medical History, \$2; letters for Dr. C. K. Sharp, Chairman, Council, \$2.25 | 4.25 | 997—Dixie Seal & Stamp Co.: Replacing broken spring and plate of seal of Association | 2.00 |
| 985—Southern Press Clipping Bureau: News clippings for January, 1928 | 5.00 | 998—Bryan & Middlebrooks, Attys.: Telephone bill in reference to suit of C. E. Hightower vs. Dr. T. E. Rogers | 1.60 |
| 986—Lester Book & Stationery Co.: Journal for permanent record, wrapping paper, paste, India ink, pens and pencils | 10.90 | 999—Addressograph Sales Agency: Repairing Graphotype machine | 1.15 |
| 987—Miss Annie Jacks: Commission on advertisements of Alexander-Seewald Co., and Pedigree Dairies, Inc. | 40.44 | 1000—E. K. Large, Postmaster: Postage | 30.00 |
| 988—Allen H. Bunce, M.D.: Salary as Secretary-Treasurer for February, 1928 | 150.00 | 1001—Miss Annie Jacks: Commission on ad of N., C. & St. L. Ry. | 9.75 |
| 989—H. L. Rowe: Salary as Executive Secretary for February, 1928 | 175.00 | 1002—Massachusetts Bonding and Insurance Co.: Premium on bond of Secretary-Treasurer for one year | 7.50 |
| 990—Bryan & Middlebrooks, Attys.: Suit: C. E. Hightower vs. Dr. T. E. Rogers, Macon, fee for T. Baldwin Martin, Atty., Cost of Court Reporter taking depositions and E. L. Webb, Chemist; defendant's share of the cost of court reporter in taking down evidence, expenses of Mr. Grover C. Middlebrooks, attending court at Macon | 188.09 | 1003—Atlanta Blue Print Co.: 100 blue prints of exhibits space in the DeSoto Hotel, Savannah, for exhibits during annual session of Association on May 9, 10, 11, 1928 | 16.00 |
| 991—J. N. Reisman: Rent for February and March, 1928 | 43.00 | 1004—Miss Annie Jacks: Commission on ad from Southern Railway | 9.75 |
| 992—Miss Annie Jacks: Commission on ad of Dr .W. W. Blackman, Southeastern Sanatorium | 9.75 | 1005—E. K. Large, Postmaster: Postage | 30.00 |
| 993—H. L. Rowe: Transportation to Savannah and return, other expenses for arranging exhibit space and securing sketch of floor space in DeSoto Hotel, Savannah | 30.00 | 1006—Dr. G. Y. Moore: Expenses attending Councilor meeting, Atlanta, March 21, 1928 | 27.50 |
| 994—Lyons-Young Printing Co.: Printing and mailing 2,000 copies of the February issue of the Journal | 530.40 | 1007—Allen H. Bunce, M.D.: Salary as Secretary-Treasurer for March, 1928 | 150.00 |
| 995—Benjamin F. Stovall: Letters multigraphed for Committee on Public Policy and Legislation in reference to legislation pending in Congress regulating the practice of the Healing Art and Vi- | | 1008—H. L. Rowe: Salary as Executive Secretary for March, 1928 | 175.00 |
| | | 1009—E. K. Large, Postmaster: Postage | 30.00 |
| | | 1010—Miss Annie Jacks: Commission on ad of C. B. & Q. R. R. Co. | 3.75 |
| | | 1011—Lyon-Young Printing Co.: Printing and mailing 2,000 copies of the March issue of the Journal | 538.40 |
| | | 1012—Dr. William H. Myers: Expenses incurred as Councilor attending meeting, March 21, 1928, and telegrams sent to county secretaries | 32.32 |
| | | 1013—Lester Book & Stationery Co.: Paper, carbon and typewriter ribbon | 5.50 |
| | | 1014—Southern Press Clipping Bureau: News clippings for March, 1928 | 5.00 |

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| 1015—J. N. Reisman: | |
| Rent for April, 1928 | 21.50 |
| 1016—Benjamin F. Stovall: | |
| Multigraphing letters in reference to physicians on scientific program, titles submitted for program and left off, exhibit space at Hotel DeSoto and to advertisers | 14.00 |
| 1017—Southern Engraving Company: | |
| Copper head plates for illustrations | 6.67 |
| 1018—Addressograph Company: | |
| Ribbon for addressograph and 1,000 B. Plates | 5.30 |
| 1019—E. K. Large, Postmaster: | |
| Postage for mailing Journal | 25.17 |
| August 3, 1927—Check, A. C. Colson return unpaid | 5.00 |
| November 2, 1927—Check, Marcus L. Hickson returned unpaid | 5.00 |
| December 24, 1927—Check, Davis Fischer Sanatorium returned for endorsement | 7.50 |
| April 23, 1928—Check, Waldo E. Floyd returned unpaid | 111.50 |
| Paid Fulton National Bank exchange for fiscal year, April 30, 1928 | 9.75 |
| Total Disbursements | \$15,683.70 |

NEWS ITEMS

Dr. R. F. Bell, formerly of Waycross, has removed to Boston, Thomas County, and will continue the practice of medicine at the latter location.

Dr. and Mrs. W. H. Garrison, Clarkesville, entertained the members of the Habersham County Medical Society and the Woman's Auxiliary at their home on August 9.

The Tenth District Medical Society held its summer meeting at Warrenton on July 23. The scientific program consisted of papers entitled: Tularemia by Dr. R. C. McGahee, Warrenton, discussion led by Dr. W. R. Houston, Augusta; Pellagra by Dr. J. J. Pilcher, Wrens, discussion led by Dr. Allen H. Bunce, Atlanta; Nutritional Needs of Mental Patients Requiring Nasal Feeding by Dr. H. D. Allen, Jr., Milledgeville, discussion led by Drs. Y. H. Yarborough, Milledgeville and R. L. Harris, Augusta; The Acute Abdomen from the Standpoint of the Country Practitioner by Dr. S. C. Ketchen, Louisville, discussion led by Drs. C. W. Crane and G. A. Traylor, Augusta; Birth Injuries by Dr. J. C. Akerman, Augusta, discussion led by Dr. Lewis H. Wright, Augusta; Agranulocytosis by Dr. J. Dewey Gray, Augusta, discussion led by Dr. M. P. Agee, Augusta.

The Georgia State Board of Health announces that the death rate from typhoid fever for 1927 was 20.6 per cent per hundred thousand population in Georgia. Total deaths were 653 out of the state's population of

3,171,000. It is estimated that for each death from typhoid, there occurred ten cases, which means that we had 6,530 cases of typhoid. Laying aside all humanitarian and mental considerations, and coming to the problem solely from an economic standpoint, you no doubt will be appalled at the gross waste in human energy in our state.

The Medical Society of the State of Pennsylvania announces that beginning with the October, 1928, issue, the former name of the Atlantic Medical Journal; the official organ of the Medical Society of the State of Pennsylvania and the Medical Society of Delaware; will be re-established and it will again become the Pennsylvania Medical Journal. The management and policy will be unchanged.

Dr. E. J. Overstreet, formerly of Bradenton, Florida, has moved to Baxley and opened offices in the Baxley State Bank building.

Dr. J. W. Ragsdale, formerly of Atlanta and a practicing physician of many years experience, has located in Alpharetta for the practice of medicine.

Dr. V. L. Brown, formerly of West Palm Beach, Florida, has removed to Fort Valley and will be associated with Dr. R. C. Smisson in the practice of medicine.

Dr. J. H. York, Atlanta, has been appointed resident physician at Grady Hospital. He succeeds Dr. Geo. H. Cochran, who has held this position for three years and recently tendered his resignation.

The Elberton General hospital is to be reopened according to the plans of the Chamber of Commerce. Messrs. J. E. Asbury, Neil Turner and Joe Allen have been appointed to arrange the reorganization of the institution. Mrs. Nell S. Paine was named chairman of a committee to be known as the Elbert Hospital Association to raise funds to pay a certain amount for the care of charity patients.

Dr. Ennis Powell, formerly of Tennessee, has removed to Swainsboro and opened offices in the Davis and Mason Drug Store. He is a graduate of the University of Georgia Medical Department, Augusta.

The University of Georgia Medical Department, Augusta, spent during the past fiscal year \$125,-098.00. The income of the university consisted of \$90,638.00 appropriated by the General Assembly of Georgia; \$21,830.00 from the city of Augusta and \$27,604.00 from all other sources, making a grand total of \$140,072.00, leaving a balance of \$14,-974.00, as shown by the audit of Mr. Sam J. Slate, state auditor.

New Martha Eggleston Memorial Hospital, located on Forrest Road at Glen Iris Drive, Atlanta, for children has been completed, and is a thoroughly modern and well equipped institution. It provides plenty of airy spaces in the corridors for the child patients.

The War Department in joining the campaign against flies, authorized the Quartermaster General to conduct a test of a system for electrocuting flies. This embodies a commercial device by which portable electrocutors with transformers are used in connection with door screens.

Drs. M. McH. Hull and S. L. Morris, Jr., announce the removal of their offices from the Grant Building to the Medical Arts Building, Peachtree Street, Atlanta.

Dr. Lynn Fort announces the opening of his office at 303 Medical Arts Building, Atlanta.

The American Public Health Association will hold its fifty-seventh annual convention at Hotel Stevens, Chicago, October 15 to 19, inclusive. Its meetings will be held jointly with meetings of the American Child Health Association and the American Social Hygiene Association. Sections will be divided into the following groups: Epidemiology, Public Health Education, Cancer, Vital Statistics, Industrial Hygiene, Public Health Engineering, Child Hygiene, Laboratory, Health Officers, Food, Drugs and Nutrition, and Public Health Nursing.

The American College of Surgeons will hold its eighteenth Clinical Congress in Boston, October 8th to 12th. Headquarters will be at the Statler Hotel and meetings will be held in the ballroom of the Copley-Plaza Hotel and Symphony Hall. The Hospital Standardization Conference will be held at the morning and afternoon sessions in the ballroom of the Copley-Plaza Hotel on Monday, Tuesday, Wednesday and Thursday. An innovation this year will be the commencement of the clinics in the Boston hospitals on Monday afternoon, continuing through the mornings and afternoons of four days.

The New York Academy of Medicine, New York City, will hold its Graduate Fortnight daily during the first and second weeks in October, except Saturdays. Programs of special clinics and clinical demonstrations have been arranged in the following hospitals which are cooperating in the Fortnight: Bellevue Hospital, Beth Israel Hospital, French Hospital, New York Hospital, New York Eye and Ear Infirmary, New York Infirmary for Women and Children, Post Graduate Hospital, Ruptured and Crippled Hospital, St. Vincent's Hospital, and the University and Bellevue Clinic, Cancer Institute, Central Neurological Hospital, City Hospital, Knapp Memorial Hospital, Beth David Hospital, Fifth Avenue Hospital, Jewish Memorial Hospital, Joint Disease Hospital, Lebanon Hospital, Memorial Hospital, Presbyterian Hospital, St. Luke's Hospital, Vanderbilt Clinic, and Women's Hospital.

Dr. Abner W. Calhoun announces the opening of his offices in the Medical Arts Building, Atlanta. Practice limited to internal.

MARRIAGES

Dr. Newdigate M. Owensby, Atlanta, and Mrs. Edna Coleman, Washington, D. C., were married on July 26th at the home of Mr. and Mrs. William A. Speer, Peachtree Road, Atlanta.

OBITUARY

Logan M. Crighton, Atlanta, Bellevue Hospital Medical College of New York City, 1888; aged 63; died July 27 at his home, 812 Piedmont Avenue. He was born in Tampa, Florida, and moved to Atlanta with his parents when only nine years of age and educated in the public schools of Atlanta. After graduating at the Bellevue Hospital Medical School, he took post graduate courses at Mt. Sinai Hospital and the New Amsterdam Eye, Ear, Nose and Throat Hospital of New York City. Dr. Crighton stood well socially as well as professionally. He was married in October, 1893 to Miss May Irwin. Surviving him are his widow and one daughter, Mrs. Kendall J. Fielder; and two sisters, Mrs. I. T. Callaway and Mrs. C. G. Giddings. Funeral services were conducted from the residence by Rev. L. R. Christie and interment in Oakland cemetery.

Dr. Gallaher E. Neal, Broxton, Atlanta School of Medicine, Atlanta, 1908; aged 43; died at his home July 20, of heart disease. He was held in high esteem by the people of his community and had built up an extensive practice. Surviving him are his widow, two daughters; Misses Mary and Helen Neal. Broxton; his parents, Mr. and Mrs. Ernest Neal and two brothers, Dr. J. C. Neal and Verner Neal, all of Calhoun.

Dr. Hubert C. Wood, Irwinton, Atlanta College of Physicians and Surgeons, Atlanta, 1900; aged 52; died at his home August 16. He was one of the leading men of Wilkinson County, mayor of Irwinton, and a prominent physician. Surviving him are his widow, mother, Mrs. J. S. Wood, and four sisters, Mrs. Marvin Williams, Atlanta; Mrs. L. J. Pritchard, Tennille; Mrs. John Todd, McIntyre; and Miss Nan Wood, Atlanta. Funeral services were conducted from the home and interment in the Irwinton cemetery.

Dr. G. L. Clark, Atlanta, College of Physicians and Surgeons, Baltimore, Maryland, 1880; aged 69; died at his home, 162 East Georgia Avenue, August 14. He practiced medicine in Shellman and vicinity for more than forty years and recently moved with his family to Atlanta. He is survived by his widow, one daughter, Mrs. Mattie C. Wiggins, Atlanta; one son, C. G. Clark, Atlanta. Interment in Rose Hill cemetery, Macon.

CANCER OF THE BREAST—Clinic

(Continued from Page 389)

the public press of the State takes up the work we will accomplish nothing.

We are accustomed to think we are getting good results in cancer of the breast, but we are not. Burton Lee, whom some of you know, is thoroughly honest. In 1924 he reported the work of the New York Hospital, and they have only 15 per cent of their cases living after five years. When Moskovitz heard this report he was amazed and came to the conclusion that they were getting better results at the Mount Sinai Hospital than at the New York Hospital. Not all of the workers at Mount Sinai would let him publish their reports, but he found the same condition held true. We may as well realize that in cancer of the breast we are making absolutely no progress whatever.

AN INDICTMENT OF CHRONIC MALARIAL INFECTION WITH A PLEA FOR A REALISTIC ATTITUDE

(Continued from Page 400)

lay public to destroy the tolerance for malaria which prevails. The term, malaria (bad air), in itself is indicative of a long-standing misconception as to the actual source of the disease. It would be better to recognize malaria by a name indicating specific parasitic blood infection.

An attitude of pessimism or of maudlin or ignorant optimism will not help in our campaign against malaria. The manifest tolerance for malaria, here and abroad, is due, I believe, to the fact that many people living in sections so long and so hopelessly malarial regard the fight against malaria as more or less futile, and therefore accept the situation; a second group, influenced by agricultural, commercial, industrial and social interests—through selfish motives or false or sectional pride, if not through ignorance—shun the truth about a similar situation and adopt a cover-up policy or one of maudlin optimism; while in still another class the attitude is one

of utter unconcern or of total disbelief, inasmuch as they assume themselves to be only slightly—if at all—affected and therefore the problem not theirs.

If the proper concept of malaria could be acquired through education and wide publicity then through national and state aid, preventive measures and prophetic medicine could be employed to better advantage.

MINUTES OF THE COUNCIL OF THE MEDICAL ASSOCIATION OF GEORGIA

(Continued from Page 410)

Eleventh District—A. S. M. Coleman, Douglas.

President Sharp and Secretary Bunce.

Dr. Bunce: The first order of business before the new Council is the election of a chairman for the ensuing year.

On ballot Dr. M. M. Head, Zebulon, was elected as Chairman.

Dr. Bunce: Next is the election of a clerk of the Council.

Dr. Myers nominated Dr. C. L. Ayers as Clerk.

On motion regularly seconded and carried the nominations were declared closed, the Secretary cast a unanimous ballot for Dr. Ayers, and declared him duly elected.

The Secretary then introduced Dr. Head as the new Chairman.

Dr. Head: Gentlemen, I wish to express my appreciation for the honor you have shown me, and will do my best to make you a good Chairman, but I request your support and cooperation.

Dr. Sharp expressed his regret at having to leave the Council after so many years of service.

Dr. Moore moved to adjourn. Motion seconded and carried.

ALLEN H. BUNCE.

Secretary.

TO THE MEDICAL AND SURGICAL PROFESSION

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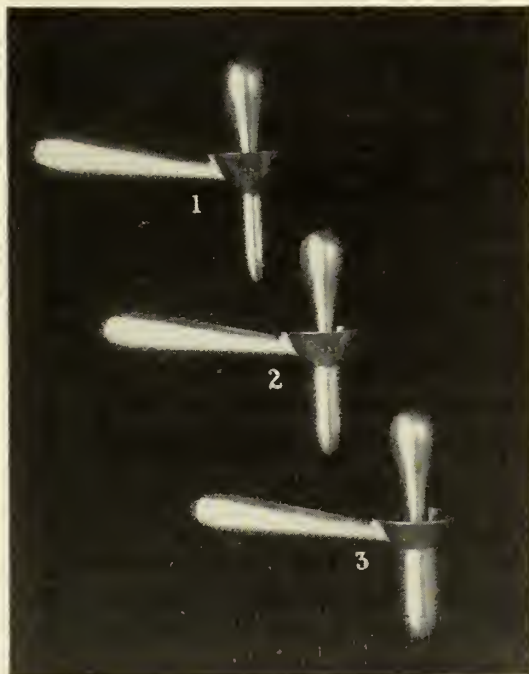
Mr. Reese Guttman, Chicago (*Journal A. M. A.*, June 9, 1928), reports the case of a woman, aged 29, who presented a right facial palsy, with typical distortion. The palsy was apparently of the central type, as the forehead did not evidence any involvement and the orbicularis was unaffected. While voluntary movements were absent, there was some response in emotional movements, as in laughing and smiling. The angle of the mouth had a distinct droop on the affected side; whistling was impossible; she could not show her teeth on that side, nor could she alternately blow up one cheek after the other. Her speech was somewhat impaired. Gustatory involvement was absent, the sense of taste being intact, and the hearing as shown by the usual tests was normal. The electrical reactions were normal. These observations definitely established a central lesion as the underlying cause of the paralysis. The condition came on fairly suddenly about four years previously. She awoke one morning to find that her right cheek was stiff and difficult to move, that it interfered with her speech. The stiffness increased until three days later she had a facial

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THE PROGNOSIS OF TUMORS*

*With Special Reference to Cell Differentiation
and Its Influence On Treatment*

EVERETT L. BISHOP,† M.D.,
Atlanta

With our present knowledge of neoplastic diseases, there is perhaps, nothing so difficult of estimation as the prognosis in a specific case of cancer. (The term cancer is used here in its broad sense of malignancy in general. The more definite terms of carcinoma, sarcoma, etc., will be used later.) There must of course, be an accurate diagnosis and the treatment must be based upon this, and finally the prognosis is estimated upon the basis of what the probable end result will be, with or without treatment. The patient is interested in the diagnosis, but the knowledge that he can be cured or that he may live a few years longer, is of vital importance to him.

To the average patient, and in some respects, many physicians, cancer is cancer and the outlook is gloomy from the start. Of course, there is no absolute way of knowing that the patient has a hundred per cent chance of being cured, nor is there any way by which we can tell that a patient is absolutely cured after treatment, for numerous instances of metastases and recurrences many years after the usual five-year period, are on record. This pessimistic attitude should not always be followed, for we know that malignant tumors vary quite considerably under different conditions. The prognosis in any given case must be based upon two separate sets of facts, clinical and histological. Neither is infallible, but both are extremely important.

There are several clinical features which influence the prognosis. The simple location is extremely important for those tumors occurring in visible or easily accessible locations for examination and treatment, are recognized much earlier and for this reason alone, offer a much better chance than those tumors which do not produce recognizable symptoms until they are fully established and beyond hope of cure. One must remember that the visible tumor is sometimes the developing metastasis from an obscure and unlocated primary lesion. This is very often true of enlarged glands of the neck from an unrecognized carcinoma in the mouth of pharynx, especially of transitional type. If I can impress but one thing upon you, remember that in cancer, delay in diagnosis and treatment is fatal. Therefore, it is our duty to educate the public so they will present themselves for examination at the first suspicious sign of a mass or ulcer, for their greatest chance of cure is in the earliest stage of malignancy, or better, the pre-cancerous stage.

The age of the patient is of importance. We have been taught that carcinoma is a disease of adult and old age, while sarcoma is primarily a tumor of the young. While this is essentially true in some tumors, it is not an infallible rule, for there are many cases of carcinoma occurring in the young individuals. I recall an epidermoid carcinoma of the tongue in a girl of fourteen, another of the larynx in a boy of seventeen, and a malignant adenoma of the rectum in a boy at the age of twenty. It is an accepted fact however, that malignancy in young patients offers a poorer prognosis than tumors in elderly people. They are more apt to be of an embryonal type, pursue a very rapid course and are quickly fatal, in spite of some possible encouraging response to treatment, especially radiation. In patients over seventy years of age, it is claimed that they are prac-

*Read before the Medical Association of Georgia, Savannah, Ga., May 9, 1928.

†Pathologist, Steiner Cancer Clinic.

tically safe from cancer, excepting that of the skin and rectum. Carcinoma of the female breast, occurring in a young woman is much more fatal than that in an elderly patient. Malignancy of the breast occurring during pregnancy and lactation is extremely malignant and offers practically no hope.

The state of nutrition of the patient may give some idea as to the outcome. A patient in whom there is marked or even beginning cachexia, will usually continue downhill in spite of surgery or even response of the tumor to radiation. The presence of demonstrable metastases either in lymph nodes or internal organs, at once changes the picture and the outcome. Likewise, in the absence of metastases the local infiltration of neighboring parts of adjacent organs must be observed, for some tumors are difficult to irradiate by surgery because of their lack of capsule and their tendency to spread peripherally. The rate of growth is of some importance for it is easily seen that a slow growing tumor is much more favorable than one which seems to spring up overnight.

Many tumors have a relatively low malignancy until ulceration and infection takes place. Infection, especially by streptococcus, accelerates the progress of the tumor, and if the infection is controlled, the tumor growth may be slowed up.

One may make a relative prognosis from the clinical features of the case, but for more or less accurately gauging the malignancy of a tumor (if it may be called accurate), one must take into consideration the histology of the tumor in question, and it should be the duty of the pathologist to go further than a simple diagnosis of malignancy. His report should give the exact type of tumor as nearly as it can be determined, and more than this, the prognosis as he sees it. Of course, the clinician should always supply the clinical data in the case. For that is important for accurate diagnosis and prognosis, although there is a slight chance of a biased opinion. The clinical features in many cases may be exactly the same or extremely similar and yet the actual histological structure widely different. This may call for differ-

ences of opinion as to the diagnosis. A tumor may be one composed of so-called "Round-cells," which one might call a "Round-cell Sarcoma," and another would class this tumor as an anaplastic carcinoma. In either event, it would be seen from the section of the tumor that it was very malignant, although the prognosis would vary slightly with the difference in diagnosis. From the histological structure, we are able to suggest the best treatment in many tumors, for certain tumors are definitely better treated by radiation and others by surgery. Very often a combination of the two is most desirable. It is well known that tumors consisting of less differentiated cells are much more malignant than those tumors in which the cells have differentiated into their full adult characters. The most complete differentiation is seen in those tumors in which the cells have differentiated beyond the point where they are able to reproduce more cells. The hornified cells of the skin and the functioning glandular epithelium are fully differentiated. Again those tumors which are very cellular, vascular and contain little connective tissue, are much more malignant than those in which there are only a few scattered cells lying in a dense fibrous stroma. Again, these features have a great influence upon the treatment, for very cellular or embryonal tumors, respond quickly to radiation, while very fibrous tumors or acellular tumors are extremely resistant to any form of radiation and therefore should be treated surgically. For example, the fairly common fibroma of the skin, which is usually classed as a simple benign tumor. These tumors are believed to have their origin in connection with nerve trunks and are properly called neuro-fibroma or neuro-fibro-sarcoma. These tumors vary considerably in their structure, some being extremely fibrous and acellular and classed as of a low grade malignancy. These tumors are properly treated surgically, with the prospect of metastases practically nil. They may recur after incomplete removal, but this is usually late in this type, one case recently seen, recurring only after twenty years. Other tumors of this group, to which also probably belongs the bulky fascial sar-

coma, are more cellular and offer a somewhat less favorable prognosis for they infiltrate locally and the more cellular types may eventually metastasize.

The system of classifying the potential malignancy according to how far the predominant cell has differentiated, seems to be applicable to many types of tumors, and their clinical course seems to bear this out.

Let us consider for a few moments, tumors of a few different locations, for it is not possible to discuss all parts of the body at this time.

Brain tumors are usually considered as extremely fatal conditions, and rightly so, but as far as the immediate prognosis, they may vary widely. The work of Cushing and Bailey, on these tumors has given us quite a different outlook. Brain tumors may arise from any cells of the central nervous system in their various stages of differentiation, from the original medullary epithelium to the fully differentiated fibrillary and protoplasmic astrocyte, and the statistics show that the tumors of cells of various differentiation vary in their malignancy and prognosis. Of sixteen different primary tumors of the brain, the majority of the cases fall into three groups, the medullo-blastoma with an average duration of seventeen months, the spongioblastoma multiforme which runs its course in twelve months, and the astrocytoma which represents the most fully differentiated cells. The first type and the second type are extremely malignant although they produce no metastases, while the last, offers the patient a considerable lease on life, even after only a partial removal of the tumor, the average duration of this type is eighty-nine months. A recurrence of symptoms in cases of this type after operation, does not necessarily mean a flaring up of the tumor but may be due to a simple mechanical blocking of the cerebrospinal fluid, or a cystic formation within the tumor calling for a second operation without especially altering the fair prognosis in the case. Radiation is indicated, especially in the very cellular types of tumors and may be used with comparative safety for the normal brain structures are very resisting to radiation. The

immediate prognosis on brain tumors therefore, can only be estimated on a study of the cell type, or response to radiation.

Skin: The average cases of malignancy of the skin offers a good prognosis, for they are seen early, and the treatment is usually successful. Basal cell carcinoma is notorious in its usual quick response to radiation, and as it is practically unknown to metastasize, the prognosis is good until late in the disease when diffuse infiltration and involvement of bone or cartilage have occurred. Squamous carcinoma is extremely resistant to radiation and requires a caustic dose to remove it. Yet, it is extremely slow in involving even the nearest chain of nodes, so that removal of the initial growth in a type one case which is the fully differentiated type, is all that is required. Just a word about melanoma or malignant mole. It requires a caustic dose of radiation to remove a tumor of this character, and as it is never possible to know the exact type of the mole, it is much safer to practice wide excision without touching the tumor itself. They metastasize fairly early, especially after ulceration and infection, and we can never be sure that metastases may not crop up later for this is a most malignant tumor, especially those in which there is little or no pigment and the differentiation less marked. For this reason the prognosis should be extremely guarded.

Bone tumors. The prognosis in malignant tumors of bone is always bad. This does not include the giant cell tumor or so-called giant cell sarcoma which was formerly believed to be malignant, but is now recognized as a benign condition, although there is one case of benign giant cell tumor, changing over as a result of infection and trauma, into a fully malignant osteogenic sarcoma, the patient dying with generalized metastases. This grave prognosis is not only true of osteogenic sarcoma but also of endothelial myeloma (Ewing's Tumor) and multiple myeloma. While the latter two respond well to radiation, and seem to have a slightly slower course (average two or three years), their early metastasis and multiplicity speak against any hope of cure. The Registry and Bone Sarcoma of the American College of Surgeons,

now has about a thousand cases of bone tumors registered, and at this time there are but twenty-two cases of malignant tumors living at the end of five years. Their committee composed of Doctors Ewing, Bloodgood, and Codman, is checking these twenty-two cases again. One can never be sure of a cure as is evidenced by a case developing pulmonary metastases eighteen years after amputation of the arm. While some of these tumors seem to grow and metastasize more rapidly than others, apparently a prognosis based on a cell type is of little value especially as the character of the cell may vary greatly in various portions of the tumor. Nevertheless, to make the prognosis in bone tumors more favorable, if this can be done, the diagnosis should be made at the time of operation or before, and here again the function of your pathologist or cytologist is not one of terminology alone but of prognosis as well.

Cervix. Here we have two distinct types of carcinoma, epidermoid carcinoma and a much less frequent adenocarcinoma. Whether a basal cell carcinoma occurs in the cervix, we are not sure, and there is considerable doubt that those cases described as such, are but transitional type and not true basal cell as occurs in the skin. It is in this location as in the skin, that we see such a wide variation of cell type, those in which the differentiation is well marked with typical spine cells, hornification, slow of growth and metastasis, but extremely resistant to radiation. On the other hand there are those tumors whose cells are of very early type with little or no differentiation, which tumor responds to radiation very well, and yet this tumor is the most malignant of cervical cancer with early extension and poor prognosis. Another paper on this program deals with two hundred twenty cases of cervical carcinoma. Of the nineteen living today out of the first hundred cases of that series, we find the cell structure to show the most differentiation, classes one, and two. No cases of particular non-differentiating cells are alive. This corresponds rather well with the findings of Broders, Martzloff, Plaut and others. It is in this type of tumors that some fairly accurate

prognosis may be given, although there are reports to the contrary. (Plaut.)

Mammary cancer. It is here that the prognosis is so frequently difficult to estimate, for tumors of the female breast vary so greatly, and patients with early tumors are presenting themselves for diagnosis and treatment. As previously mentioned, age, pregnancy and lactation, and lymphatic involvement all influence prognosis greatly. It must be remembered that the supraclavicular or mediastinal nodes may be involved before the axillary chain, especially in tumors of the upper and inner quadrant of the breast. Lee gives an extremely poor prognosis in any case with glandular involvement, reporting only one case out of 75 alive after eight years. Greenough's reports are different. He classifies tumors of the breast into three classes of low, medium and high malignancy, bases upon the degree of differentiation, such as arrangement of the cells into glands secretory activity, uniformity of size of the cell and nucleus, hyperchromaticity and mitoses, regular or irregular. Tumors with definite glandular structure are of low malignancy and he reports sixty-eight per cent cures (eighty-two per cent without nodes and fifty per cent with.) In those classed medium, he reports thirty-three per cent (forty-three without and thirty-one with). And in the high-class twenty-one cases and no cures. In tumors of mixed cell structure the malignancy is greater and the prognosis correspondingly poor. The inflammatory type of mammary cancer is quickly fatal, as are various embryonal and anaplastic carcinomas, very often involving both breasts and occurring in young women (under 40).

Digestive tract. Little actual prognostic aid is obtained in tumors here, for they are usually well advanced when recognized. A small per cent of well localized tumors without nodal involvement are apparently well after operation. Although we can usually look backward and correlate the vague symptoms which were not recognized as suspicious of malignant disease, yet, we can frequently examine a gastric tumor for instance, and see why the growth is slow and metastases late, by the actual differentiation of the structure

of the tumor. The same rule holds true that the more differentiation, the less the malignancy.

At the present time, we have no certain and definite cure for all forms of malignant tumors. With our present knowledge of the reaction of certain tumors to radiation, some being extremely susceptible and others being resistant, some being slow of growth and late in maturity, it seems that proper treatment is surgery, radiation or a combination of the two, and the treatment must depend upon knowledge of the structure of the individual tumor, and having some idea of the expected result, the prognosis, good or bad, may be estimated.

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DISCUSSION ON PAPER OF DR. BISHOP

Dr. S. E. Bray, Savannah: I enjoyed this paper very much indeed. It is true that basal cell tumors do not metastasize, but it is a peculiar fact that there are four cases of basal cell tumor on the face that have metastasized to the glands. This has been proven by an eminent pathologist.

Speaking of melanomas, Cannon reported six cases treated by electrocoagulation and followed by roentgenotherapy which had remained well for five years, and if the patients remained well for one year longer he would give them a clean sheet. That is a

very good result. If one can cure six cases of melanoma and get away with it, it is better than we do with tumor of the cervix. In the clinics in Philadelphia and New York they are giving those tumors electrocoagulation, followed by roentgenotherapy and are getting pretty good results.

As to the clinical diagnosis of epitheliomas of the skin, it is a fact that 75 per cent of them occur on the face. Borders' work has brought out the fact that we may have a mixed tumor, the basal cell and the prickle cell, and in some instances we cannot see just which type it is, whether the basal cell or the squamous cell, just by looking at them. The tumor that comes on the back of the neck, that Darier, of Paris, has described, is a mixed tumor. This makes us sit up and take notice. The dermatologists especially seldom get a chance to make a pathological study of these tumors, because they are treated by electrocoagulation, followed by roentgenotherapy.

Dr. Lee Howard, Savannah: Dr. Bishop has given us a splendid paper, and I think we should give it a free discussion. The histological study of all tumors is of great importance. It seems that the tremendous amount of work that has been done in looking for some etiological basis for cancer has been up to now a total failure. It was thought to be some parasitic thing, but we have to look now to the cell origin of tumors for any classification of their etiology.

As to the question of skin cancer, or basal cell epithelioma, I think we should not call this growth cancer, but report them all as epitheliomata and not tell patients they have cancer when they have these small beginning, epitheliomatous tumors. They respond very quickly to almost any proper local treatment, and they do not classify with the serious cancerous tumors of other tissues.

I was sorry I did not hear the first of Dr. Bishop's paper, but it is certainly along the line of any progress we are making in our knowledge of cancer. In one or two cases that I thought were sarcomatous the patients remained well after eight or ten years, and if I had the tissue now I would probably make something else out of it. The microscopic examination of tissue is the best means we have for diagnosing cancer. It depends upon what the cell histology shows, as Dr. Bishop stated, rather than the type of tumor as to what we must expect. I recall a case sarcoma in which the cell made us wonder whether it was sarcoma or fibroma, after two removals and finally amputation of the

leg, the man is well after four or five years.

It seems to me the only hope we have of adding to our knowledge the disease known as cancer is in cell study and especially differentiation as to embryonic type.

Dr. E. C. Thrash, Atlanta: In dealing with neoplastic growths we must differentiate between a potential cancer and a real cancer. This is especially true of the melanotic types. I doubt if any melanotic cancer has ever been cured. The potential melanotic tumor, the black mole, has been cured and can be cured. It is not a melanotic tumor, however, until the cells break through and "go wild," and when they are wild they are wild like wildfire and death results. If you get these melanotic growths you have to get them in the potential stage, when you have only a black mole to deal with.

As to dealing with the real cancers surgically, it has been well handled in that way, fulguration and cauterization has been well handled, but we need more information about treating these cancers with radiation. The general impression is that the cancer cell must be killed, but the optimum way of handling this is to bring about a state of the cell that causes a cessation of mitosis. If you can bring about an arrest of the cancer cells and stimulate the stroma cells of the cancer you have the optimum methods of treating them. Excessive radiation is death not only to the cancer but to the patient, and we must get away from too much bombardment of the tumor. We will kill more patients than we will help, but if we will use just enough radiation not to shock the normal tissue we can arrest the development of the growth. Until we come around to the idea that we are going to arrest these tumors and produce a fibrous mass, and not continue to bombard them, we are not going to get anywhere. I have a woman patient with a large tumor which is a fibrous mass as large as an orange. She has fibrous glands in her axilla but I do not touch them. You can keep these patients alive and comfortable if you will bombard them sufficiently to arrest development and not try to kill the cancer cell.

Dr. Ralph H. Chaney, Augusta: I wish to thank Dr. Bishop for bringing this important subject before the Association. The question of determining the prognosis is of great value to the surgeon. In check up on breast tumors we should be able to give the prognosis from their situation and histological structure. When the cytology and histology show that the lesion is absolutely un-

(Continued on Page 481)

SUPRACONDYLAR FRACTURES OF THE HUMERUS*

A Method of Accurate Reduction

LAWSON THORNTON, M.D.,
Atlanta

Fractures of the humerus just above the elbow usually present a characteristic picture—described as a gunstock deformity. The upper fragment is displaced anteriorly, and is rotated ninety degrees. It is this type of fracture that this procedure is designed to replace.

The lower fragment is controlled by gripping the upper forearm and elbow between one's thumb and fourth and fifth fingers, while the tips of index and middle fingers are placed upon the epicondyles. The fragments lie, as it were, in a tube, the walls of which are composed of periosteum, muscles, blood vessels and nerve trunks. Traction on the forearm tightens the walls of this tube and causes the fragments to approach their relative anatomical position. While an assistant stabilizes the shoulder girdle above the shoulder joint, gentle traction is applied to the extended forearm. The palm of the left hand rests upon, but does not grasp the upper arm, so that the upper fragment may be permitted to rotate when gentle backward pressure is made over the biceps muscle. This pressure is made synchronous with traction. At the same time the index and middle fingers of the right hand are forcibly flexed, until the posterior cortex of both fragments come in contact. This usually requires an angulation of 90°. In the meantime the upper fragment has swung around into its normal transverse axis. The posterior cortical edges then being impinged, act as a hinge and the fracture is steadily closed.

As the elbow is held acutely flexed, an X-ray picture in lateral and antero-posterior view is made and quickly developed. If reduction is not accurate, the manipulation may be repeated and again checked up with X-ray.

Slight changes in position may be made by digital pressure over the olecranon proc-

*Read before the Medical Association of Georgia, Savannah, Ga., May 9, 1938.



Fig. 1. Fractures of the humerus just above the elbow usually present a characteristic picture—described as gunstock deformity.



Fig. 2. The lower fragment is controlled by gripping the upper forearm and elbow between one's thumb and fourth and fifth fingers while the tips of index and middle fingers are placed upon the epicondyles. The palm of the left hand rests upon, but does not grasp the upper arm, so that the upper fragment may be permitted to rotate when gentle backward pressure is made over the biceps muscle. This pressure is made synchronously with traction.

ess, or over the epicondyles, with counter the biceps muscle. In our experience, gentle pressure over the lower end of the belly of and more accurate manipulation can be done



Fig. 3. The index and middle fingers of the right hand are forcibly flexed, until the posterior cortex of both fragments come in contact. This usually requires an angulation of ninety degrees.



Fig. 4. The posterior cortical edges then being impinged, act as a hinge, and the fracture is steadily closed.

without the use of fluoroscope. We prefer checking up with quickly developed films.

Gentleness and minimum of trauma in fractures about the elbow are essential. This procedure minimizes trauma. It gives one an accurate conception of the position of the fragments in relation to each other and the surrounding tissues throughout the manipulation. It is possible to control both fragments and replace them accurately with gentleness.

The forearm is held acutely flexed by a plaster of Paris splint applied to the posterior surface of the arm. No bandage is allowed to be placed around the arm adjacent to the elbow joint.

17 Alexander St., N. W.

Fracture & Orthopaedic Clinic,
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Figure V

DISCUSSION ON PAPER OF DR. THORNTON

Dr. Kenneth McCullough, Waycross: There is nothing that comes into the life of a man in the average practice of medicine that causes more trouble than fractures, and I suppose there is no fracture that causes more trouble than the supracondylar. The accurate method of reduction demonstrated by Dr. Thornton seems to be ideal. If we could all get the results he shows we could not complain. Dr. Thornton merely demonstrated his method of reduction and did not touch on the after-treatment of the fracture. The after-treatment I think is probably as important as the reduction. The simple method of immobilization, as shown by Dr. Thornton cannot be beat. He did not say how long he keeps his fractures up after he applies the plaster bandage. It has been my experience that in a fracture near the elbow joint, if early active motion is instituted it will do away with a lot of the ankylosis we get. A good many years ago

we used to figure the fracture around the elbow joints with 50 per cent function of the joint as pretty good. Today there seems to be no reason why we can not get a perfectly normal function in the elbow joint following fracture of that type.

By early, active motion we have several things to consider. If we have a patient under personal supervision where we can watch him and have the motion started ourselves, it is all right. If we have someone else massage the arm, the chances are they will pull it out of shape. If you take the arm down anywhere from the tenth to the fourteenth day and make a little gentle traction, if you steal a couple of degrees on this every few days, you will soon have the elbow working almost normally.

One other thing to consider in putting up the fracture: We all know the tendon of the triceps, after the fracture is reduced, acts in some measure as a splint. Careful padding of the parts is essential in putting these fractures up, particularly in the cubital space, and we have to watch the arm for any dis-

turbance in circulation. One can easily depress the brachial artery and shut off the blood supply to the lower part of the arm.

Very little can be said about Dr. Thornton's method of reduction. It is unquestionably a very efficacious procedure, as he has shown us by his pictures. One other thing that I thoroughly agree about is the use of x-ray pictures rather than the fluoroscope. I never like to work in the dark and think it is always well to have a record of what we find. When examined under the fluoroscope all you can do is to remember the condition, but if you have x-ray pictures you can take them into court if necessary.

Dr. Theodore Toepel, Atlanta: I wish to commend Dr. Thornton for the excellent way of picturing his splendid results in his treatment of fractures. It is just like Dr. Thornton, he always takes a great deal of pains in all his work, and his method of exhibiting the pictures shows his great care in reduction. I think his way of reducing fractures is the best there is. In applying the posterior splint, or no splint, it is entirely a matter of what kind of fracture we have and what kind of approximation we look at. If there is a jagged projection which is hard to overcome, you must use your own methods. I do not think it does any harm to use the fluoroscope to see what you are doing. Of course, we must have the x-ray picture made before and after treatment, in case of court procedures.

In the after-treatment it is the passive motion which should be resorted to as quickly as possible. Some say ten days in a child, but as Dr. Thornton showed us, the cartilaginous substance is thrown out very rapidly, and I think it better to say four or five days rather than ten or fourteen. That must be done under your own supervision. I do not want any man to ever say to a patient, "Go home and carry a full coal scuttle." I have heard this instruction given to patients but it is a mistake. Do not turn these patients off before you are absolutely sure of good anatomical and functional results, and you will never regret it.

Dr. Robert L. Rhodes, Augusta: I wish to congratulate Dr. Thornton on his presentation. My experience is that these fractures are not so hard to reduce as to hold. In speaking of the kind he showed, and oblique ones, I frequently see these and have quite a lot of difficulty in holding them. I am partial to using careful manipulation under the fluoroscope, and I also believe in the x-ray picture before and after treatment. When

we deal with the oblique fractures, the simple fixation will not be sufficient to hold them. It not infrequently requires quite a good deal of counter-pressure on two sides to hold them in position. Another factor comes into play—when we see these cases swelling has taken place and in this stage they do not lend themselves to sharp flexion early. We must wait for the swelling to go down before we can undertake any sharp flexion. This can be benefited by a little extension, putting the patient to bed with a weight over a pulley and getting a little traction, and wait for the swelling to subside in a few days.

Dr. Robert Drane, Savannah: Whether you should use the fluoroscope or not depends on how many fractures you see. If you have many fractures to treat and use the fluoroscope on many of them you will burn yourself. If you have one only once in two months, all right. I have been knocked down twice, in spite of warning all where to keep their feet.

I should like to know whether the child Dr. Thornton showed was anesthetized, how late after injury fractures can be reduced by this method, and so on. Of course, the earlier you get them, the better.

PATHOLOGY AND PHYSIOLOGY OBSERVATIONS ON HEMODYNAMIC ACTION OF EPINEPHRINE

Carl A. Dragstedt, Chicago (*Journal A. M. A.*, Oct. 6, 1928), concludes that the mineral effective dose of epinephrine on sustained administration in the unanesthetized dog produces pressor effects. The mineral effective dose of epinephrine in the unanesthetized dog is less than from 0.2 to 0.4 cc. of a 1 to 1 million solution of epinephrine per kilogram per minute. The vascular (pressor) response to epinephrine is more sensitive than the intestinal inhibition both in the unanesthetized dog and in man. The repressor response to epinephrine is an abnormal response mediated at least in part by anesthesia. Compatible suprarenal vein blood collected from one dog and reinjected into a second unanesthetized dog at the rate at which it was collected has a slight pressor effect absent into the system blood. There is no reason to suppose from these experiments that the suprarenals are not normally and continually secreting epinephrine in amounts sufficient to modify the vascular bed, and there is reason to believe that an augmentation of secretion easily conceivable will have hemodynamic effects.

A BETTER MEDICAL SOCIETY*

E. C. MCCURDY, M.D.,

Shellman

To have a better Medical Society, we should have a good president, a good secretary and good attendance, all three of which we can have by being sufficiently diligent. The presidents should be elected in alphanbetical order until every member has served as president; this does not apply to the larger medical centers, which would be impractical. What I am saying about Medical Societies, applies to county societies, only, which feeds the district, state and American Medical Societies.

The president should never be absent from a meeting, if possible for him to attend; if a case of emergency should arise that prohibits him attending, he should get in touch with the secretary or vice-president and have some one hold the meeting in his stead; having the secretary to read out to the members his excuse and regrets. This shows to all that he stands for "a better medical society."

The secretary is the most important officer of your society; every county has a good secretary, find him and elect him each year for life. There are some qualities that belong to a good secretary, that do not belong to every doctor. He should be affable, well-liked by all the doctors of the county, not afraid of work, many little nice things that is not his official business, he can do for the members that will count for his worth. If he has some lax members, he should ride over and see them and urge on them the importance of attending the meetings regularly, not one time; but until they get to attending regularly; a good secretary will never give up until he has a good attendance. He can be a great factor in keeping his society together and well pleased, helping someone to decide on the subject he is to read a paper on at next meeting. Answer all communications promptly, collect all money due the society at the proper time, keeping full and

correct minutes and reading minutes of last meeting each time; supply the president with an order of business at each meeting.

The meetings should be held once each month in a certain town, in a certain building and at a certain hour; this should be done until it becomes a habit with the men, where and when to attend their medical meeting. We have tried alternating at different places and halls and find that the men always get mixed up. Let nothing come in the way of your carrying out your program if there is only two or three members present, besides the president, go on with the program; if you disband on account of a small crowd, those that are present then will not attend next time; hold your meeting and do better next time. The members should meet ten or fifteen minutes before the session is called to order, to have a free for all talk together, as the meeting will be called promptly on time and should adjourn in one hour; then the doctors will know just how long they will be detained at the meetings and can do their work accordingly.

Every doctor can give one or two hours each month to his county medical society, if he tries. What you get out of anything is what you put in. Besides your regular monthly meetings you should have two or three get-together meetings each year where medicine is not discussed—a fish fry, a barbecue or supper, knowing the nearest way to a man's heart is down his throat, some of the strongest ties are formed around the festive board. No jealousy will enter an organization of this kind; if you have your regular monthly meetings, attend them and a get together meeting two or three times a year—it will promote a friendship one toward another that the world can not destroy.

Every man has an open door to his life that can only be closed by himself; let him close this door to jealousy, envy and hatred; it does not hurt the one you are jealous of, but it hurts you; your body disturbed by the feeling of jealousy and hatred, secretes a toxine that poisons your system and shortens your life in this world, and dooms you in the world to come. Rid yourself of this fearful

*Read before the Medical Association of Georgia, Savannah, Ga., May 10, 1928.

malady by frequent meeting together and right thinking—this is the only remedy.

Our colleges should impress on the young men when they leave to attach themselves to their county medical society and attend its meetings; if they do this it will be equal to a post-graduate course every year, and keep them in harmony, one with another. These young men have no jealousy in their hearts and if they are started right they will not have this spirit to fight. It is said that the doctors should educate the laity in the most common diseases by giving them lectures through the schools or the various societies in the prevention of disease, sanitation and how to care for themselves in case of an accident until they can get a doctor; but it is of more importance to educate the doctor himself. Every doctor in the county should regularly attend his county meetings and when called on to read a paper, should do so. Any doctor can get up a paper for his society if he tries; they want a paper from your bedside experience, not from books, and when you get men from the medical centers to read your county papers, you ruin your county medical society; educate the doctors of each county to read their own papers; this draws them closer one to the other and gives a common interest and this is the feeling you are trying to promote. Do not malingering around your office on your medical meeting day when your society needs your presence so bad.

Now if a Judas should get into your society do not get mad and quit attending your meetings, remember that Jesus only had 12 and Judas was one of them, this is when you should be strongest. If you have a small crowd at your meetings do not get mad and quit, go to work in earnest, remembering that God's command to Adam was, by the sweat of the brow you shall earn bread and the same command is for you and me. From a selfish standpoint every doctor should be a member of his medical society, not only a member; but should attend. Osler once said only about sixty per cent of his patients, that he made a positive diagnosis, 40 per cent either got well or died, without a diagnosis. You can be sued for a false diagnosis or for

malpractice of various kinds; if in the medical society they furnish you attorney's fee and fight your case to the court of last appeal; if not you tread the wine press alone.

DISCUSSION ON PAPER OF DR. McCURDY

Dr. G. Y. Moore, Cuthbert: This timely paper of Dr. McCurdy's is most excellent, and issues a challenge to every man present. We usually have two papers from him as good as this each year in Randolph County. I have often stated that if we had one doctor in twenty like him distributed throughout the state we would have a 100% State Association. We all know that conditions are quite different from what they were several years ago, and this has been brought about by county society meetings all over the state. The point is to consider that you, as individual members, can make your state society better. Charles Lamb was asked on one occasion to be introduced to some man in the audience. He said, "No, I do not wish to meet him, for if I do I will like him, and I do not wish to like him."

Doctors should know each other; no better way can be suggested than monthly meetings which bring us in closer relationship. Our interest should be one, let us show the spirit of friendship and make the meetings interesting. Put something into them, pull together and then we shall have a better medical society.

Dr. J. O. Elrod, Forsyth: I have enjoyed Dr. McCurdy's paper very much. An old hobby of mine, organization, came to me when I noticed that he was going to read a paper with this title. He spoke of electing a secretary for life. I do not know that we should do that, for I think each county has several men who would make good secretaries, and I think there is some inspiration among the men to do what they can for the society if it is at all active. As he said, the life of any society is the secretary. If they do not have a good secretary they do not have much of a society. The secretary is the man who sees that the members really get out, who arranges that the programs are prepared as they should be, and after all he is the whole society so far as organization is concerned. I do not believe there is anything that can do more for the good fellowship, as Dr. McCurdy said, than keeping up proper medical ethics of the county, and if you keep up proper medical

ethics in the county societies we will have a more ethical society throughout the state. To have a good state association we must have good county societies, and the main thing is that we must have enough interesting programs and induce the men moving into each county to belong to the local society. Dr. McCurdy referred more to country counties than to city counties, but I think this applies just as much to city counties as the others. I know some of the city societies do not have the attendance at their county society meetings that they should have, any more than the country societies do, and where this occurs is where the most strife and jealousy exists. I think the men in the cities could take this fine talk of Dr. McCurdy's to themselves just as much as the men in the country. Unfortunately such talks as this do not reach the men who need it most. The men who hear these things are those who attend their county society meetings and their state society meetings, and the meetings of the national organizations. They do not need so much, except that they are told to go out and do missionary work and get in touch with the men who do not go, and get them in. Doctors, as a rule, are fine fellows if you know them. I know of no pleasure that I get out of life that equals attending a medical convention and meeting the men I think so much of. This will apply to your county society meetings.

I think the thing for the men who are here is to have the men who are not members of the county society become members and then see that the men who are not attending will come to the county meetings. In that way we can keep up a fellowship that it is not possible to keep up in any other way. Since I became a member of the state medical society in 1904, I think I have missed only two meetings, and I have always felt that I wanted Georgia to have a 100 per cent membership of ethical physicians.

Dr. C. L. Ayers, Toccoa: I wish to discuss this paper for two or three reasons. One is because Dr. McCurdy was a classmate of mine at Emory, and he was familiarly known in that class as "Pat" and was celebrated for the amount of wit and good common sense he possessed. I am sure that after listening to this paper I can state that after going through twenty-six years in the practice of medicine he has not lost any of the good sense and wit which he had in the medical college.

Dr. McCurdy has brought out a good subject, medical organization. The profession

cannot be what it should be to the state or to the laity unless we have a well-organized body. Getting together in society meetings over the state will do a great deal to improve the equipment of the physician. A few years ago a celebrated case was being tried down in Macon, Ga., and one of the attorneys stated that the friction of two minds often causes the spark of truth to scintillate. He died immediately after making that remark, but that was merely a coincidence, and if the doctors of Georgia will get together at these meetings and rub their minds together it will bring out some sparks of truth, and I think they can do this without any fear of dropping dead. I think we make a mistake, possibly, in not disagreeing with a man occasionally on what he has to say. Most of the discussants keep still if they do not agree with the remarks made by the speakers, but a little constructive criticism is sometimes very helpful.

I wish to bring out one point that I think will help materially in the county societies with a small membership. In Habersham County they have only ten members, but they have a meeting every month regularly. They meet at each other's homes, and always carry their wives with them. They have a good scientific program, and when that is over they have a luncheon and have a good time. They have monthly meetings, and that is one of the best societies I know about. I think the Ladies' Auxiliary is having as much to do with aiding medical organizations as anything in the state.

I enjoyed the paper very much and if we are to have the kind of state society we want we must keep up the unit of medical organization, and that is the county society.

Dr. Theodore Toepel, Atlanta: One point which I think is very important has not been stressed sufficiently. I have watched the educational problem in Georgia, and can take that as an example. By that I mean the consolidation of small county societies and having them meet jointly. It has been the rule in our association that two members may compose a society, that is all it takes, one can be the president, the other the secretary, and then they can draw lots as to who shall represent that society in the state organization. Unless these two men are unusually energetic, what will they accomplish? Would it not be much better if a society having from two to five members would join with an adjacent society? That would be much more effective, I am sure, for all concerned. My plea is for consolida-

tion of the weaker and smaller county societies.

Dr. Allen H. Bunce, Atlanta: On behalf of the Council and other officers of our Association I feel that I should thank Dr. McCurdy for this excellent talk on medical organization. We must remember that while we need scientific papers, we need to hear the last development in medicine and surgery, we need something else—we need to remember that we belong to the profession and this places upon us conditions that are other than purely scientific. In fact, at the meeting of the secretaries last fall a motion was passed requesting all organizations to have at least one paper on medical organization and one paper on medical economics. These things concern all of us. We have heard a paper by Dr. McCurdy on organization, and later we will hear a paper by Dr. Harbin on medical economics, both of which are given by request of the committee on scientific work.

Dr. E. C. McCurdy, Shellman (closing): I thank you very much for your discussion of the paper. We have instructed our secretary that if a man does not pay his dues at the proper time that he shall send a personal check for the dues and that we will not let him lose anything by this action.

As for Dr. Toepel's remarks about consolidation, that is a very good idea if they have not enough members to make up a county society. We try to impress upon our members that if they come to the society meeting we will not detain them longer than an hour. One time not long ago I was sick in bed with flu and I got some one to tell them that I could not attend the meeting. I wanted to show enough respect for the president and secretary to let them know why I could not go. I want them to know and understand that I stand for a better medical society. Another thing, I think we should tell the other fellows that from a selfish standpoint, if from no other, they should belong to the medical society. Sir William Osler said that he only made a diagnosis in 60 per cent of his cases, that the other 40 per cent died or got well without a diagnosis. You know that if you are sued for malpractice, your society will protect you to the last ditch. If you are not a member you have to tread the wine-press alone. Many men do not realize what they are missing by not belonging to the medical society. Many of them are practicing quackery and do not realize it. Most men will do the right thing if they know how. Dr. Harrold made the statement yesterday

that a woman came to him with a lump in her breast which she had had for ten years. and she had consulted many doctors and had been told not to bother about it unless it bothered her. Take a man in any good society and he knows better than that. He is bombarded on every side about his diagnosis. We sometimes have a symposium and hear all about cancer, but evidently the men who looked at that woman's breast were not members of any medical society or they would not have made such a mistake.

Another thing about the county societies—we have a man who is twenty-five miles away, and yet that man is one of the most regular attendants. If you will instruct the men that they can attend the meetings if they really try, you can ultimately convince them. We have tried having meetings every way, in the morning, and at night, but we have found that the afternoon meeting is best for us. The men can do their work in the forenoon and attend the meeting in the afternoon. A doctor came to see me when I was sick with flu and I said to him, "Tomorrow the medical society will meet." He said, "Yes, I have not forgotten it." I asked him if he was not going, and he said "No, one of the doctors is out of the state and you are sick and I have to look after things." I told him that he should go, that he could give his wife his telephone number, and that he could get anywhere he needed to go within forty minutes. He followed my advice and went, and came up and told me that they had a good meeting. Every doctor can attend his county society meetings, every single one of them, if they will use the proper amount of energy.

TRICHLORETHYLENE TREATMENT OF TRIGEMINAL NEURALGIA

In the neurologic ambulatory clinic of the University Hospital of Amsterdam, trichlorethylene has been given in all cases of trigeminal neuralgia. The results obtained, though fairly encouraging, are less striking than recorded in the first publications on this subject and lead Ignaz Oljenick, Amsterdam, Holland (*Journal A. M. A.*, Oct. 13, 1928), to the following conclusions: (1) In a comparatively small number of cases of trigeminal neuralgia or irritative neuritis the inhalation of trichlorethylene, continued for some time, appears to give excellent and lasting results. (2) In some cases the period of relief after trichlorethylene may be interrupted by renewed attacks, which as a rule are of a less violent character than before. (3) In most cases it is a useful temporizing measure, which, by diminishing the number and vehemence of the attacks, permits the patient's general as well as local condition to improve. (4) As the pain is only rarely uninfluenced by trichlorethylene, it should be tried in every case. (5) Furthermore, since trichlorethylene has no effect on facial neuralgias other than those of trigeminal origin, it may occasionally be of value in differential diagnosis.

WHAT IS NEEDED TO IMPROVE THE PRACTICE OF OBSTETRICS*

J. R. MCCORD, M.D.,†
Atlanta

The men who are now practicing good obstetrics, young or old, will continue to practice good obstetrics. The men practicing poor obstetrics are not, in my opinion, altogether to blame. It has been but a comparatively short time since schools have started teaching the real principles of obstetrics. The mechanism of labor, about which the entire practice of obstetrics revolves, is, today, often hurried over so as to get the more interesting clinical subjects. Anything less than thorough knowledge of this mechanism is a makeshift and a fundamental fallacy in the practice of obstetrics. So it is probable, whatever advancement comes in the practice of obstetrics in our country, will come as a result of recent graduates well trained in the principles of obstetrics, and will not be due to any rejuvenated activities of the men now in practice. The average man of mature age now practicing medicine cannot be prevailed upon, in so far as I have been able to ascertain, to pay dutiful attention to those details so essential for the successful practice of obstetrics. This is true not only of the men in the smaller communities, but it is true just as often in the larger cities, with well conducted clinics and with one or more medical schools.

Good obstetrics can and is being done in the home, obstetrics with no mortality and a low morbidity. Education along present lines is accomplishing a vast good. But months of earnest prenatal work can be suddenly swept away by one careless vaginal examination. Doctors must be taught the pathology of the subject. Obstetrics is a science, and to practice it as such, takes long and intensive training. There are no short cuts. Just as long as people who have not had this training practice midwifery, there are going to be lives needlessly lost and women

made to suffer unnecessarily. With the basic principles of obstetrics thoroughly mastered, the technical details of delivery, whether in the home or in the hospital, are simple and become of minor importance.

The man doing obstetrics needs as the two most important items of his equipment a thorough knowledge of the mechanism of labor and a bountiful store of patience. Soap, water, a safety razor and a pair of rubber gloves complete an ample equipment. Which is better, a woman delivered on a dirty bed with not a piece of sterile linen, with a well shaved and washed vulva, attended by a man thoroughly familiar with the mechanism of labor, one who wears rubber gloves and does not make vaginal examinations; or the same woman surrounded by sterile linen and all the accessories, attended by a man who puts false security in a pan of bichloride and makes vaginal examinations to satisfy the curiosity caused by a lack of knowledge of the fundamentals of labor? I am in favor of the former and so I teach. Please do not misunderstand me; I do not minimize nor neglect to teach asepsis and antisepsis. I try not to cloud the issue with a maze of technicalities, that in order to carry them out the student has not the time to think of the more important basic mechanism.

I think abnormal obstetric cases, in so far as it is possible, should be hospitalized. The question of the hospitalization of these cases brings up another problem. The average hospital of the smaller cities and rural communities have few men who are skilled in obstetrics. It has been my observation, when the general surgeon cares for an abnormal obstetric case he follows the line of least resistance. A knowledge of the mechanism of labor is just as important in an abnormal case as in a normal one. And there are few general surgeons who have the full knowledge of this mechanism. As a result, we see many Cesareans performed without the studied deliberation of the indications involved. I need not dwell upon the high morbidity and mortality resulting from such work. I would not have you think that hospitals are a panacea for bad obstetrics. Results in hospitals, if statistics are to be believed, are quite as de-

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†From the department of Obstetrics, Emory University School of Medicine.

plorable as those in the home. It is not a question as to whether the patient is or is not in a hospital, but, how much of the fundamentals of obstetrics does the man, who is attending her, know.

It is difficult to see how the present morbidity and mortality of obstetrics, as commonly practiced, will be materially reduced so long as the present universal temper of impatience and unrest prevails. A doctor with any sort of operative experience rarely allows a case of some length to terminate spontaneously. The average American family is becoming increasingly difficult to manage, and no doubt is often the cause of premature piddling. The widespread teaching of some men, of methods devised by them to facilitate enormous practices, instills into minds not fully trained, procedures that are but conducive of harm. Too much has been said about giving women painless labors when the ulterior motive is to give the doctor shorter labors.

A man, to properly practice obstetrics, must have an obstetric conscience. This is a product of his early environment. One cannot give it to him; one only adds the finish. The man who starts practice with the dollar mark fastened to the end of his nose never qualifies with a high grade medical conscience.

Young men start in practice with every intention of doing good work, but are often led into pernicious practices by their older colleagues. As a result of this ill-given advice and because no immediate bad results are observed, they conclude that much of the conservatism taught them in school is needless. When bad results are observed, they have become so accustomed to careless work it is easy for them to shift the responsibility with a clear conscience. Their unwillingness to fight the prejudices of the ignorant people, often causes them to do things they know are wrong. It would be interesting to know the number of women who are delivered through unshaven vulvas.

Ignorant people appreciate good obstetric work and they will flock to the clinics where good work is being done. Information of value pertaining to their physical well-being

probably can be more rapidly disseminated among the ignorant than the well-to-do.

The proverbial chain has never been stronger than its weakest link. Schools with weak obstetric departments, that teach largely by didactic lectures and are not able to give students generous practical work under careful supervision, turn out men who know but little obstetrics, and they practice carelessly and indifferently the art as an aid to further work. Turn them out of school knowing more about obstetrics than any other subject, and they are eager to go into the work as a specialty. I believe an outdoor obstetric service, at best but poorly supervised, is the wrong way to give men their practical experience in obstetrics.

"A laborer is worthy of his hire;" an ill-paid specialty has helped to keep men from being interested in their work. But before concerted effort is made for larger fees the profession must put the art on a higher plane. This, as I have said, is a direct responsibility of the medical schools.

Custom only has decreed that a surgeon of mediocre ability can collect, without demerit, \$150 for an easy appendectomy, while an obstetrician of training can stay with an occiput posterior case for hours, finally deliver as a hard forceps and be called exorbitant for presenting a bill of like amount. It is again a question of fundamental training. The doctor and the laity must be taught the dignity and complexity of the art. This has never been done in the past, and as a result, the people do not look upon the practice of obstetrics as they do the practice of surgery. This is an age of publicity. If obstetrics had received as much publicity as pediatrics, our speciality would now occupy a very much higher position.

I have noticed in medical meetings attended by average men, a discussion of eclampsia will hold rapt attention, but half of them will leave a talk on the mechanism of labor even when illustrated by lantern slides. Having little knowledge of the subject they can see no reason for the presentation. Basic principles of anything bore, but they are as necessary to success as air is to life.

I hope you will not think I intend this

paper to be anything of the oracular; I do not. I have made all the mistakes most common in the practice of obstetrics. Some of these mistakes that are the cause of the present high morbidity and mortality follow:

(1) In not making a complete physical examination of the patient early in pregnancy. Many things of vital importance as to the subsequent course of the pregnancy can be learned: Tuberculosis, heart disease, chronic nephritis, focal infections, anaemia, syphilis and so on. Pelvic measurements are not to be relied upon, but they do give one a comforting supportive information.

(2) Failure to take regular blood pressure readings. I would not minimize the value of urine examinations during pregnancy, but I am firmly convinced they become of minor importance when compared with blood pressure observations.

(3) Acute constitutional tragedies that complicate pregnancy should be treated and the pregnancy ignored.

(4) Asepsis and antisepsis are standardized. Carelessness and indifference rather than a lack of knowledge are the offenders. Asepsis cannot be practiced with an unshaven vulva. Acquire such a knowledge of the mechanism of labor that vaginal examinations will not have to be made to satisfy curiosity. Keep up the general resistance of the patient; any lowering of this resistance invites activity of those pathogenic organisms constantly present in the body. Minimize unavoidable traumatism. Try to develop a delicacy of touch in all operative procedures. Never use brute force.

(5) In my opinion, the most common mistake of all is the failure to recognize posterior positions of the occiput. The diagnosis and treatment is, in the majority of cases, not difficult and can be quickly mastered. A knowledge of the mechanism of normal labor is, however, a primary requisite. Is it not a reflection upon the profession that the most common complication of labor is so little understood?

(6) Occiput posterior positions are often the cause of the next most common mistake. Delivery cannot be accomplished through a cervix that is not dilated and effaced, with-

out injury. To be sure, there are rare instances when delivery must be undertaken before the cervix has become dilated and effaced. But be sure that impatience is not the indication. A disastrous chain of consequences can result from such work. Sepsis and invalidism are not infrequent. When nature cannot dilate and efface the cervix without a certain amount of tearing, how can we hope to do so without even greater injury?

(7) Pituitrin is a wonderful drug when properly used. It is probable the harm it has done far overbalances the good. I feel that pituitrin cannot be used routinely to hasten labor without doing damage, always to the mother and not infrequently to the baby.

I recently attended a meeting where a report was read, which showed the cases delivered by trained and supervised midwives in Newark, N. J., had a lower mortality and morbidity than the cases delivered by doctors in the hospitals of the same city. The statistics were irrefutable. "Unnecessary and careless vaginal examinations and needless operative procedures" is probably the answer.

In conclusion, may I say that the Obstetric Department of Emory University with its wealth of controllable material is eager and willing to extend every courtesy to any visiting doctor who wishes to observe the mechanism of labor and study the basic principles of obstetrics.

DISCUSSION ON PAPER OF DR. McCORD

Dr. J. P. Bowdoin, Atlanta: Gentlemen, you have under consideration at the present moment one of the most important subjects in medicine. Georgia is a great state. We produce in round numbers 70,000 babies a year. Perhaps they are the greatest assets we can consider at all. The day never comes, the sun never rises and sets, but two mothers in this great state of ours give up their lives in sacrifice that their babies may be born. The lowest figures I have had from our statistician show that with every 117 babies a mother dies, and as a matter of information I brought some figures from the State Board of Health for your consideration. I hope you will study them. I hope you will

take Dr. McCord's advice, which is good. I am familiar with his work, as I furnish a nurse who does the follow-up work in his clinic. The things he has accomplished are remarkable. We should all do better obstetric work—we must do better work. I wish to read these figures for your consideration:

| AREA | Death Rates per 1000 Live Births: 1922 | |
|---|---|-------------------------|
| | All Puerperal Causes | Puerperal Septicemia |
| United States—Birth Registration area of 1915 | 6.2 | 2.2 |
| England and Wales | 3.8 | 1.4 |
| Australia | 4.5 | 1.4 |
| Ireland | 5.7 | 2.0 |
| Japan | 3.3 | 1.2 |
| Netherlands | 2.5 | 0.7 |
| New Zealand | 5.1 | 1.8 |
| Scotland | 6.6 | 2.0 |
| Sweden (1920) | 2.7 | 1.3 |

The death rate (6.2) from all puerperal causes in the United States is higher than the rate for any of the countries shown in this table except the rate (6.6) for Scotland, while the puerperal septicemia rate (2.2) for the United States is the highest, without exception.

STATES AND RATES

Death rates from puerperal causes per 1,000 live births in specified Southern states by color in 1924.

| STATES | All Puerperal Causes | | | Puerperal Septicemia | | |
|-------------------|-------------------------|-------|---------|-------------------------|-------|---------|
| | Total | White | Colored | Total | White | Colored |
| Florida | 12.1 | 9.0 | 18.7 | 3.7 | 2.6 | 5.9 |
| Georgia | 11.6 | 9.0 | 16.5 | 3.5 | 2.6 | 5.3 |
| Kentucky | 6.2 | 5.7 | 13.1 | 2.8 | 2.5 | 7.1 |
| Maryland | 6.6 | 5.7 | 10.2 | 3.1 | 2.5 | 5.5 |
| Mississippi | 9.5 | 6.5 | 12.6 | 2.9 | 1.8 | 4.0 |
| N. Carolina | 7.7 | 6.6 | 10.4 | 2.0 | 1.6 | 2.8 |
| S. Carolina | 10.8 | 7.6 | 14.1 | 2.6 | 2.0 | 3.2 |
| Virginia | 6.5 | 5.0 | 10.0 | 2.3 | 1.9 | 3.0 |

Deaths and death rates per 1,000 Live Births from Puerperal Causes in Georgia, First Quarter of 1928:

| | Number | Rate |
|----------------------------|--------|------|
| All Puerperal Causes | 109 | 8.5 |
| Puerperal Septicemia | 28 | 2.2 |

We want to know the cause of this infection. It was carried in, some one is responsible for it. The doctors of Georgia must wake up, and I hope you will all cooperate with us in every way possible. We want the doctors to tell us about the circumstances under which these deaths occur in puerperal septicemia. You must not jump at conclusions, but a thorough investigation should be made of each maternal death and report your find-

ings on the death certificate to the State Board of Health.

Dr. C. K. Sharp, Arlington: Dr. McCord's paper is indeed a most valuable and timely one, and I concur in every word of it. Coming from one with such a rich experience, both as a teacher and a practitioner, it bears the mark of authority and we should all sit up and take notice. There are three points in his paper which I wish to emphasize:

First, the necessity of a thorough knowledge of the mechanism of labor. As a single instance: What havoc is wrought by delivering with forceps, or, worse, by giving pituitrin with the head lying in an O. P. position, with the cervix undilated or, rather, incompletely dilated. If given ample time the head will rotate the necessary three-eighths of a circle in the vast majority of instances, and thus be converted into a more favorable position. I will admit that it is difficult to resist the pleadings of the parturient and the bystanders to "do something." It is better, particularly in primiparas, to give them rest with morphine and scopolamine. This produces an amnesia, and they forget the flight of time or the fact that they ever had pain.

Second, is the need of patience. If any one is so engrossed in other cases that he cannot spare the necessary time for a woman to deliver herself in the natural fashion, unless he is assured for good reason that this cannot be done, he should refuse to do obstetrics.

Third, is the obstetrical conscience. This, to my mind, covers everything. The question that should control our action invariably in the conduct of labor is, what is best for mother and child. We must do nothing that would hazard the health or life or either.

I suppose I have officiated at the birth of almost a regiment of babies, amidst all sorts of surroundings, from homes of wealth with every convenience to the lowliest hovel, and had I known in my earlier years of the value of a good sharp razor, sterile gloves and a properly prepared vulva, I am sure that my records—had they been written, as I wish they had—would have been more presentable. Practicing in a more or less rural section as I do, it is the exception to have a trained nurse to shave and prepare the vulva for examination; in the absence of this most desirable help I do this myself. For the past three years my morbidity and mortality has been *nil*. None has ever objected in the slightest degree to this preparation, and the dirtier the surroundings the more necessary

the procedure seems. It is noticeable that an insignificant mortality rate exists in the practice of the ignorant negro midwives; the reason for this it appears, is that they uniformly do not make digital examinations, and I always take pains to encourage this practice in them. Two or three years ago while attending the post-graduate clinics at Emory University, I am not quite sure but that it was Dr. McCord who remarked that "a woman would be infinitely safer to fall on the street in labor and deliver herself unaided than to be examined under the best surroundings through an unprepared vulva, with ungloved hands." This made a profound impression on me and I profited by it.

After we have watched the parturient through the 280-day period of gestation, and have safeguarded as perfect a state of physical perfection as possible, we must not undo everything by employing an improper technic in her delivery. After a normal presentation is assured, it is a useless and hazardous procedure to persist in making digital examinations. If our curiosity gets the best of us we may occasionally press the finger over the integument of the perineum, well away from the vulva, to ascertain if the presenting part is stretching the outlet. I have seen others, and have been guilty myself of stretching the perineum to prevent lacerations. The only sure way that I know of to prevent lacerations during childbirth is to cut the perineum with scissors in those cases where a tear is inevitable. A smooth cut is easier to repair than a jagged tear, and unites better.

Dr. McCord's paper is an inspiration to me, and those of us who practice midwifery should heed its teachings.

Dr. A. J. Mooney, Statesboro: To discuss this paper which is so full of high lights, and was written by one of the master obstetricians of Georgia, who has within his grasp a wealth of material to study and to teach from, it is only necessary for me to touch upon some of the most salient features in order to add my little mite to his presentation. If we could all visit Dr. McCord's antinatal clinic in Emory University, if we could observe the care that is taken in connection with all instructions to expectant mothers, if we could observe the care that is used in making the Wassermann test, I am sure we would have far less abnormal babies, and there would be far less insane individuals in the future, if we might have the privilege of visiting his clinic and practicing what is taught there.

As far as the actual labor part is concerned, I can add nothing to what this master obstetrician has laid before us so plainly and so beautifully. It is my part to deal more fully with the postparturient conditions within the limit of time placed upon me. When we think of the mortality that they have in Ireland, which is said to be the lowest of any country in the world, it makes me wonder whether or not their vital statistics are correct. When we think of the mortality as betrayed by the vital statistics in the United States, which show among the highest, I wonder whether or not our vital statistics are superior to those of Ireland, which makes ours higher. I will leave that to your own interpretation. Suffice it to say, that thorough preparation such as Dr. McCord has outlined I am sure will have a great deal to do with lowering the mortality and probably the morbidity as well. Improved obstetrics have undoubtedly lowered the mortality everywhere, and gentlemen after it is all carried out, with the instrumentation that must be carried out in many instances, what of the morbidity? That is the part that we are most interested in. I know of no way to prevent laceration of the cervix. The only thing we can do is not to use any meddlesome manipulation. I do not know of any way to prevent perineal laceration, although in certain cases we can do a great deal toward preventing it. However, when you hear a doctor say that he has no lacerations, you can mark it down that he has made no examination. That holds true.

Dr. Charles B. Upshaw, Atlanta: I was pleased to hear Dr. McCord stress the importance of some of the fundamentals in obstetrics, particularly conservatism in treatment and also the aseptic conscience. In addition let us add that the attending physician should be in *attendance*, always during active labor.

Again, if we understand the true mechanism of labor, we shall be tempted less often to interfere. There can be no doubt that interference explains to a very large extent, our high mortality and morbidity in obstetrics. That is why the midwives in New Zealand have such a low mortality rate. They are forced to practice conservatively or not at all. In occiput posterior cases, particularly, conservatism must be practiced. Almost routinely I give them morphine and scopolamine during the first stage, and I am fully convinced that it saves many operative

MEDICAL ECONOMICS*

W. P. HARBIN, M.D.,

Rome

Mr. President and members of the Medical Association of Georgia: About March 1, 1928, I received a letter from Dr. A. H. Bunce, our secretary-treasurer, saying that while he was attending the Secretary's Conference at the American Medical Association in Chicago last fall it was advised that each state have at its annual meeting at least one paper on Medical Economics. He also, in his letter, invited me to write a paper on this subject. He stated that he thought my experience and training would enable me to write a paper on the subject. I wish I was as competent to present this subject to you as Dr. Bunce has indicated in his letter to me. However, I thank him for the compliment.

It is very fortunate that the suggestion to discuss this subject comes from the American Medical Association for I am sure that the medical profession in Georgia is ready and anxious to discuss methods that will enable us to solve some of our financial difficulties. In the past most of the important large medical associations have disallowed papers on this subject. I was at the meeting of the Southern Medical Association last year in Memphis and a member of this Association was present and wished to bring up for discussion the question of certain deductions to be made by doctors while filling out their income tax reports. This member of our Association was told that the constitution of the Southern Medical Association would not allow any paper or discussion except on scientific subjects. It is gratifying to note that a change of sentiment is in progress. In the past this has been the customary ruling and have we not been unfair to ourselves in this matter? The papers and discussions in the past in our association have been in the interest of the advancement of scientific medicine. The men of our profession as a rule have always put the physical well being of

patients above every other interest and if we fall short of this ideal in the future we will lose everything. In view of this altruism, can there be any reason why we cannot discuss matters that will help each other to solve one's financial problems which are of importance in rendering a scientific service. This subject is the most disagreeable one that our profession has to face because of certain traditional prejudices but the question must be solved. If all the time and energy spent along this line could be turned to the study of medicine and research work the span of life would be increased at a very rapid rate and the community would profit thereby. It is very common for certain colleagues to refer to others as practicing commercialism and it is likely that the accuser is as guilty as the accused. Such accusations have had the effect of intimidating discussions of matters pertaining to finances. I am prepared to believe that the medical profession needs more of the commercial spirit which becomes increasingly needful in rendering a scientific service to our patients who not only crave sympathy but also demand efficient service.

Papers on Medical Economics may of necessity deal with matters that are very unpleasant but these questions daily confront us in our individual lives. Such questions could possibly account for the absence of papers on this topic at our annual meetings in the past.

Medical Economics begins when a young man decides to study medicine. After this in most instances, he is financed by someone for eight to ten years. In other words he devotes about one-ninth to one-seventh of his three score and ten years to preparation, so he begins his work after his internship with an incurred obligation and he is to serve the public and in a large measure his state and country. In most instances the state has done nothing or a minor part in financing him during his preparation for the practice of medicine; consequently there is a right to demand pay for medical attention from the public. So many men of our profession are in debt at the end of their preparation and those in debt and those free from debt enter the practice of medicine with their

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seniors who in a sense are competitors. There should be more co-operation and a less spirit of competition. Many a high-class physician has been forced to sacrifice his ideals and efforts at scientific efficiency to recoup failure in financial affairs in order to make a living. Warbasse in an article, says "The practice of surgery along with that of medicine now approaches the end of its regime under economic competition. At present most practitioners are involved in the competitive struggle; as also are their patients." Personally, I do not see the end of this struggle in the near future. If it could come by some means at an early date it would mean much for our colleagues and their patients. Group medicine of the ideal kind has eliminated competition without destroying individualism and has partly solved the financial question as far as overhead expense is concerned. When these two questions have been settled the medical man can do the best for himself and his patient. "The greatest contributions to the medical science have not been inspired by money." There are probably very few groups of the kind referred to and there is little chance of the number being increased rapidly. A study of these groups does not show so much commercialism as self-sacrifice. Some men of successful groups make less than they could by individualistic practice. However, they are usually accused of being commercial.

In the beginning of our careers we were advised not to sue people for the collection of our accounts because the ill will incurred would be a menace. If a patient is able and will not pay for "honest professional service" he should be made to pay. As a rule when a patient does not settle his account he will not be your patient in the future and he will very likely say unpleasant things about the doctor he owes.

The work of medical students is conceded to be harder and longer than the work of preparation of other professions. This work and indoor life has been a large factor in the high death rate from tuberculosis in medical students. The average patient does not realize how arduous this preparation is and the rewards should be in proportion to work done.

The doctor's life is one of irregularity. We are expected to work day and night. Last fall at a meeting of the College of Surgeons a surgeon said that he had a doctor friend in Philadelphia who slept all day and answered calls at night for other doctors. By such a plan as this the strength and efficiency of the profession could be greatly conserved.

Competition in the commercial world has been set aside through organization and co-operation and the Traders Journal summarizes this philosophy as follows: "The traders association idea is simple. It is based on the premise that the collective intelligence of a group of men is greater than the intelligence of any one of the individuals and that unity of purpose and unity of action will carry an industry further in its fight for prosperity than can be done by twice the effort expended at haphazard by individuals."

The doctor is indispensable to the hospital and hospitals are indispensable to the doctors. The nearer the doctor's office is to the hospital the better it is for the hospital, the doctor and the patient. If all the doctor's offices were in the hospitals it would be better for everyone concerned. If a doctor's office is in an office building it is very hard for him to have the facilities that a hospital could give without duplicating an overhead expense. Patients are going to hospitals more than ever for examination and observation. When they go to the best equipped offices for examination and treatment they have to pay for the office facilities in the centrally located office buildings. In the present state of competition the medical men are compelled to have their offices in a central location where contacts are made more quickly and easily. Many of the physicians have nurses, bookkeepers, office attendants to look after the telephone and look after office patients. They have also x-ray machines, laboratories, electro-cardiographs, physiotherapy, apparatus with possibly a technician for this department and much other apparatus. The hospitals are required to have an equal number of helpers and just as much equipment and more. The patient pays the expense at the doctor's office and when the patient goes to a hospital he may have to pay for the

same facilities at the hospital because some hospitals make a flat charge for laboratory, x-ray and other work to every patient. The doctor's office equipment is in competition so to speak with that of the hospital. The hospital has more facilities for a doctor than he can have in an office building provided the hospital is willing to furnish this facility. If a physician could have all of his patients in one hospital and his office in co-operation with a hospital it would save the time of the doctor and he could do more and better work and the charges to patients would be less. The ideal place for a doctor's office is in the hospital, but I realize that there are difficulties to prevent this now which at a later time can be overcome. This duplication of equipment and salaries violates every law of economy.

The discussion above concerning co-operation between doctors and hospitals is not intended as a criticism of methods in large cities.

This duplication of service referred to can be eliminated partly in the future when hospital and office buildings are being built. In many places there are an unnecessary number of hospitals which could be combined and thereby make better institutions. It is also possible for the medical men to partly eliminate duplications in their services to patients.

There are many in our profession who believe that the practice of medicine will have to continue as an individualistic service to the patient. The Mayo Clinic has demonstrated the possibility of mass production in our profession but there is probably no neglect of individualism. This clinic is the greatest financial success of any institution of its kind in the world and it is also one of the greatest philanthropies in the world. Financial success in our profession does not necessarily mean commercialism.

There is no way by which the public can pay the medical profession of the past and present for services rendered in saving life, the prevention of disease and the prolongation of life.

Today the cost of hospital and professional service to the patient is largely in our hands;

if we cannot eliminate duplications, and unnecessary cost the state may do it for us.

DISCUSSION ON PAPER OF DR. HARBIN

Dr. Theodore Toepel, Atlanta: I first wish to congratulate the scientific committee for including this paper on the program of our meeting. I understand it was suggested by Dr. Bunce, our secretary, who attends meetings so often and knows what is going on at the office of the American Medical Association. I am very glad that the paper was so ably presented to us by Dr. Harbin.

We must overcome traditional prejudice, and the American Medical Association is blazing the way and requesting us to do it. I wish to cite the legal profession, the members of which always get paid for everything they do. If anything, they are the first to get paid, and to leave to their clients what is left. Our ministerial brethren are looking for jobs that pay better salaries. Furthermore, organized labor is protected, they protect themselves by organization. The doctors have not reached this stage as yet, because we are altruistic and the public has expected charity work from us. They do not realize that our overhead expense, our fourteen years of preparation which we are obliged to have, the four years of high school, four years of premedical work, four years of medical school, and then two years of post-graduate work, entitle us to be well recompensed for our work. I am sure we are entitled to a fair and just compensation. At the meeting of a charity association held recently, I was asked to discuss this problem, and I made the statement to them—"Is it fair for you, ladies and gentlemen, representing all these charity organizations, to ask us to do all the work free of charge for which you as secretaries and directors receive good and high compensation?"

Let us remain unselfish and true to our scientific attainment but add business methods to our armamentarium.

Dr. J. O. Elrod, Forsyth: This paper brings back Dr. McCurdy's paper on local societies. The thing the local society can do most is to do away with "dead-heads." We have plenty of them everywhere. Dr. Harbin's paper brought out the city man, and he connected hospitals with it. The majority of the members of our Association are men who live in the country. We do not have the hospital facilities so much. I agree

with Dr. Harbin's remarks in his excellent paper, but I believe we men in the small towns of three, to twenty-five hundred individuals, have to get our societies together to protect us from dead-heads. We are having constant calls from the organization, Dr. Toepel mentions, to have us do things free of charge. I think the medical profession has done more really altruistic work for the people of this country than all others put together, including the ministers. I do not mean to bemean the ministers, but whenever they do not get pay for their work they quit the ministry and go into insurance work or something in which they can get more remuneration. How many of us have known physicians who quit their practice and go into work that paid better? Very few. The societies can organize a Credit Bureau and get to know all those fellows who are trying to get service free of charge. When a new doctor moves into a community he immediately has plenty of work to do. Those who have not been paying for their medical services go at once to the new doctor. Often the doctors in these towns are glad to have new doctors move into their community in order to get rid of these undesirable individuals. It is not fair to those doctors that they are not told what to expect.

I again wish to congratulate the committee on having this paper in regard to taking care of the economic phase of our work.

Dr. E. C. McCurdy, Shellman: I enjoyed Dr. Harbin's paper very much. A man who is able to pay for his meat and his flour, and to go to the drug store and pay for his drugs is able to pay his doctor. The other day I saw a statement that Dr. Elrod had sent a man who moved to our town. It was a bill for \$70.00. I asked him how long he had owed Dr. Elrod, and he said for two years, that the bill was for fixing his child's leg. I asked him if he was not satisfied with the work, and he said "Perfectly, we can't tell which leg is fixed." I told him to go at once and send Dr. Elrod a check. If a man pays his other bills and not his doctor he should be made to pay him. The way I do, when a man fails to pay his account at the end of year, is to take a note with 8 per cent interest. If it is only for \$5 I make the note for \$5.40, and then I have him next year. Those of us who live in small towns where they have money for just a little while once a year, must do these things, for if we let them get by we don't get our money. What they want is for you to issue them a little bottle of medicine, they think that will do them good. They are not buy-

ing your advice. I tell them often that I do not give them the little bottle of red medicine, that they are buying my advice, but they feel better if they have a bottle of medicine in many instances. The doctors are to blame for the condition that exists, and for not running things on a straight business basis, for when we get old and decrepit and our steps are feeble these same individuals will throw us down. I had a man tell me not long ago that they would like to have a new man move in, that we wanted pay for everything we did. We have about a thousand individuals and four doctors in our town. If they buy anything else that they want or need they go to a bank and give a note and a mortgage and everything else, but they let the doctor wait. I pay my butcher the first day of every month, and I charge my butcher for what I do for him, and that is what we all should do. We are just as much "called" to our profession as ministers are "called" to preach the gospel, but if we make a preacher pay for his medical services it is not considered right. I think they should pay us and then if we pay the preacher everything will be all right.

Dr. Thomas E. Rogers, Macon: This is a problem with all of us. It is impossible today to practice scientific medicine without lots of expense attached to that practice. We cannot practice scientific medicine any more without x-ray equipment, laboratory equipment and so on. If each individual man is going to maintain these things he has a tremendous overhead. One of the great troubles in the cities and small towns is the dissension among doctors. This is a great handicap. In the cities five or six men can get together and keep up a laboratory that will pay all of them. In the small towns with from two to five doctors, if they would get together they could maintain a laboratory and x-ray equipment that would enable them to practice scientific medicine without much expense.

Speaking of "deadheads" we all have to deal with those individuals, but organizations such as I have mentioned will eliminate a great deal of that difficulty. If you wipe out the dissension and practice in groups, whether you do group practice or retain your individuality but work together, you will get rid of a lot of the "deadheads." So far as suing them is concerned, I do not think that makes much difference. If you sue a man you may get your money but you make him mad. If he does not pay you, you do not care if he is mad, for he may call

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HOME MANAGEMENT OF DIABETES
MELLITUS*

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Hartwell

The diagnosis of diabetes is being made with a definite increase in frequency at the present time in comparison with even a few years ago. Parallel with, and probably due to, the increase in the consumption of sucrose in the United States to approximately 110 pounds per capita, there has been an absolute increase in the incidence of the disease. There has been a further relative increase due to the fact that diagnosis is being made earlier and in the milder cases before the development of the characteristic diagnostic triad of polyphagia, polydipsia and polyuria. Several factors help to account for this, among them: A higher average of training in laboratory procedures as the younger men with more thorough laboratory training come to constitute a larger proportion of the medical profession; the development of more delicate reagents and technique in the tests for glycosuria; increasing knowledge of biochemistry; the wider extension of life insurance and periodic health examinations with more frequent examinations of the urine of the apparently healthy; increasing interest in diabetes upon the part of the laity; and above all a conviction upon the part of the medical profession that an early diagnosis now means a prospect of a lengthened and useful life instead of virtually a death sentence. Another factor that is leading to the discovery of cases is the diabetic himself, who, trained in the simple test for glycosuria, is interested in playing around with it and occasionally examines other urines than his own. Within the past six months this has brought to light in my own experience two cases which would not except for this have been diagnosed: one an elderly gentleman with diabetic history who had for years thought himself cured; the other, a sister of a patient who had no reason to suspect impairment of health.

On account of these aids to early diagnosis one who is interesting himself particularly in the management of diabetes will find among his patients a considerable proportion of mild or moderately severe cases and these will need little more than education in diabetes, in the signs of impending trouble, and in the necessity of general supervision. The severer cases will require in addition a nice adjustment of their insulin dosage to the dietary requirement. Aside from the so-called accidents of diabetes, such as acidosis, coma, gangrene, intercurrent or contemporaneous disease, the needs of the diabetic are relatively simple, but must be provided for with absolute accuracy. There is no place for guesswork nor any great demand for therapeutic judgment. The laboratory, the yard-stick and the scales furnish definite indications for treatment and are accurate and dependable.

The less complicated the management of any disease the more likely is proper treatment to be widely disseminated and the more likely is the average patient to receive the benefit that scientific medicine has to offer him. For this reason a scheme of treatment is presented representing the minimum in its requirements.

The intelligent care of diabetes requires the co-operation of four distinct agents, and the more thorough this co-operation the more surely will success be attained. These are: the laboratory, the physician, the nurse, and the patient.

1. The laboratory. Necessary laboratory work is divided between the patient, the physician, and the clinical laboratory. The patient learns to test his urine daily for sugar by the Benedict qualitative method. The physician needs to bother with few tests but should know that his reagents are dependable and glassware clean. A mistake frequently made in the test for sugar is in allowing the urine and reagent to boil too short a time. The mixture should be boiled hard for at least two minutes or kept in boiling water for five minutes, since urines containing small amounts of sugar will not reduce the copper immediately upon coming to the boiling point. Rarely do I bother with other tests than the Gerhardt for diacetic acid. fer-

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mentation to differentiate nonfermentable sugars, and Benedict's qualitative for glycosuria. It is essential, however, that every new lot of Benedict's solution be tested by boiling with and without dextrose to determine its dependability and that only fresh yeast be used in the fermentation test. The clinical laboratory should be within two hours distance of the patient in order that glycolysis may not vitiate the blood glucose test. It will do frequent blood sugar determinations, an occasional glucose tolerance test, and rarely an estimation of the carbon dioxide content of the blood plasma or the hydrogen ion concentration of the blood. It should of course be equipped to do any other biochemistry indicated but we are concerned here only with the minimum requirements for the management of diabetes.

II. The physician. The knowledge essential to successful treatment is not hard to gain and one who is unwilling to master it would do well to refer his cases to some one who is more interested. A properly balanced diet is by far the most important element. Ignorance of food values is due to indifference and not to inability. A patient who had only a grammar school education and who previously had no idea that such a thing as a calorie existed, learned in three days to count diets accurately for her illiterate husband, at the same time doing her cooking and housework and caring for her infant child. If such one learns diets so readily, a physician should master it without difficulty. His knowledge, however, should be exact, so that he can deal with assurance with any problem that may arise; else the confidence of the patient will be lost and failure will surely ensue. Complete, justified confidence in the scheme of management is the sine qua non of treatment and if I were convinced that one of my diabetics had not this confidence I should feel it my duty to advise him to seek another advisor.

It is unnecessary for the physician to burden his memory with the details of the composition of the various foods since the patient follows strictly his diet tables. Most of my patients in the absence of a diet card can count their food more accurately than I. He

must, however, know the dietary needs of the patient, so that he may determine the caloric requirement and how to divide it adequately and safely between proteins, fats, and carbohydrates. My method of counting diets has been described elsewhere, and need not be repeated in detail. Briefly it consists in adjusting the total food intake to keep the patient slightly below ideal weight for his age, build, and height and allowing one gram of protein for each kilogram of body weight, the remainder of the caloric intake being divided between carbohydrates and fats in the proportion of one gram of the former to three of the latter, this giving a total glucose to fatty acid ratio of approximately 1 to 1.6.

No elaborate equipment is required. Other than stethoscope, office scales with measuring rod, sphygmomanometer, suitable laboratory supplies for the simple tests enumerated, a few crystals of potassium oxalate, suitable containers for blood samples and syringes for intravenous work, will rarely be of use, but these should be always immediately available.

III. The nurse goes into the home, trains the patient in his usual environment, and remains with him until his education is sufficient to enable him to depend upon himself. He is taught to count and record his food values, the administration of insulin, the symptoms of hypoglycemia, the premonitory symptoms of the chief complication³, and above all is impressed with the paramount importance of reporting to his physician immediately the development of any untoward symptoms. The ordinary nurse is not competent to impart the requisite instruction until she, herself, has had special training, but to the nurse who is willing to acquire this special training the care of diabetes offers pleasant and lucrative work. Inasmuch as the success of the whole plan of treatment depends upon her, it is essential that the physician himself train her in his own methods. She must know food values and something of food economics; she must know how to make the diet palatable and satisfying to the appetite, the proper technique of the administration of insulin, the symptoms of impend-

ing complications, hygiene, particularly of the feet, the test for glycosuria and its interpretation, and above all she must be able to recognize insulin hypoglycemia and combat it promptly, for she will occasionally be hours away from medical aid and must depend upon her own resources. Patients taking insulin in large doses will sometimes go into coma without premonitory symptoms, hence I always have the nurse keep on hand small quantities of adrenalin chlorid solution and dextrose. Fifteen minims of adrenalin solution intramuscularly will bring about an immediate return to consciousness and then dextrose or other carbohydrate may be administered. One of my nurses observed that powdered sugar placed in the mouth of a comatose patient unable to swallow quickly relieved the insulin reaction. Furthermore, the nurse needs to be able to instill into the mind of the patient the firm conviction that he is master of his fate; that with diet and insulin he need have no fear; that if he breaks faith he will surely die. I have been fortunate in being able to secure the services of a nurse, herself an almost total diabetic, who can metabolize only an insignificant amount of carbohydrates without insulin, yet who is able to work steadily in comfort because she has learned her diabetic lesson. Her serene confidence in diabetic management is an inspiration to those she serves.

To attempt treatment in the home without an efficient nurse has in my experience proved futile and I am no longer willing to accept the responsibility. I have not the time nor the inclination to devote hours of time daily to instruction in the simple mathematics required in diet computation; and were I willing to undertake it, objective instruction under supervision in the actual preparation of his menu is superior to didactic lessons in the office.

IV. The patient. If the diabetic would live long and comfortably he must have certain education in living. At best radical alterations in his way of living are imperative, but it should be the aim to adjust the treatment as accurately to his past mode of life as is compatible with safety, for two reasons: one, that too radical changes are prone to upset the diabetic and result in the occur-

rence of one or another of the accidents to which his disease renders him susceptible; the other, that he is more likely to remain faithful to a mode of life that is made easy for him. For example, a man of affairs whose diabetes was discovered when he appeared for examination for reinstatement of a lapsed life insurance policy, learned his diabetes but was irked by the necessity of bothering with his food. His wife, a very intelligent woman, preferred to study diets and have his meals served to him relieving him of the annoyance. The nurse just mentioned, finding it difficult to live safely while on ordinary duty because of the disturbance in domestic arrangements in private homes caused by serious illness, earns her living by nursing and training diabetics. An old lady with a blood sugar of 260 miligrams per 100 mls of blood, with polyphagia, polydipsia, polyuria, and beginning gangrene, who remained hungry on a maintenance diet, was made comfortable by the substitution of an equivalent amount of 3 per cent vegetables and 5 per cent fruits for the oat meal she had been having for breakfast. Opportunities for making such adjustments should be eagerly welcomed because they build up the morale of the patient by showing him what can be done for his comfort and pleasure without jeopardy to his safety.

The question of morale deserves especial consideration since, unless the patient has it, disaster is inevitable. He must be absolutely convinced that his physician knows his disease, its complications, and how to deal with them, and that he, himself, knows how to manage his life and habits so as to keep his disease under control. If he has such confidence there will rarely be trouble from his breaking training; if he does not have it he is not properly educated and will soon be in trouble—not an unmitigated evil if not too serious, since it is a sign warning him of danger and affords opportunity to complete his education.

I like for my patients to know each other as occasion offers. When two of them are together, if a hint or two is dropped in the way of comparison or contrast of their cases they are immediately off on an animated dis-

cussion of their experiences. It favors a spirit of competition or esprit de corps. They take quite an interest in each others progress. If one patient gets careless with his diet, has a recrudescence of symptoms or intercurrent disease, others rally round with sympathy, advice, or criticism and aid wonderfully in boosting his morale. From each other they learn of the dangers to which the diabetic is subject, the causes leading to danger, and receive an object lesson in how to avoid them.

In the orderly routine of a hospital, if its dietetic department is efficient and its laboratory dependable, the severe or complicated case can be brought under control more readily, particularly on account of propinquity to the laboratory. After the emergency is past the patient must be trained in living and adjusted to his environment. It is inexpedient to allow him the run of the hospital kitchens, storage, and sterilizing rooms and he cannot acquire the familiarity with the management of his diabetes that he can in his own home. When he leaves the hospital he faces a new situation and too frequently becomes discouraged and quits.

The advantages of home management are that the patient is trained in his own kitchen to select his foods from the regular family larder, that he works in an environment to which he is accustomed and in which he feels at home, that he tests his urine on his own cook stove or other heating appliance, and cares for his insulin apparatus with the means at hand. He is not compelled to adapt himself to a new situation before attaining skill in the management of his case from practice. He is surer of himself and does not readily become discouraged; hence he is less likely to break regulations.

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DISCUSSION ON PAPER OF DR. MCCURRY

Dr. Harold M. Bowcock, Atlanta: I have enjoyed Dr. McCurry's paper very much because he has described the only satisfactory arrangement for treating the diabetic patient in the home. He has stated clearly, and emphasized the responsibility of the patient, the nurse and the doctor. The cooperative

and uncomplicated case can be given the best of treatment in the home, even though the diabetes is severe, under the careful guidance of the doctor, and the constant supervision of a competent nurse who is thoroughly trained in the dietetics of diabetes, the administration of insulin, and the testing of urine specimens. All of this knowledge must be imparted to the patient by nurse and doctor. The training period should not be less than ten days. Almost nothing can be accomplished without fulfilling these requirements. The complications of diabetes, such as coma, gangrene, and infections demand hospital treatment because the hospital offers facilities for meeting any emergency and for closer observation of the condition of the patient. The hospital laboratory is indispensable under such circumstances. I wish to emphasize the point that every complication of diabetes, no matter how trivial it might appear in the non-diabetic, constitutes an emergency in the diabetic individual.

The chief disadvantage of the home instruction of the diabetic is psychological: the patient may not grasp the importance of his condition, particularly if the diabetes is mild. In the hospital the diabetic is in constant contact with other diabetics who are striving to master the principles of treatment in the special diet kitchen and laboratory, and by private and group instruction. Dr. McCurry has mentioned the importance of building morale by contact between patients.

Dr. Joslin has shown clearly, in his splendid new book, and other publications, that the expectancy of a long and useful life has been offered to the diabetic sufferer by the advent of insulin and newer methods of diet management. Deaths from diabetic coma are to be lamented, because they are usually the result of ignorance or neglect. During the past few years the majority of diabetic deaths occurring in large clinics have been due to intercurrent infections or to cardiovascular accidents. Many diabetics are now living long enough to die of prematurely old circulatory systems. In going through my records of about fifty colored diabetics whom I have treated in the Grady Outpatient Clinic, I find that over fifty per cent show definite evidence of arterio-sclerosis. These are mostly mild or moderately severe cases of several years' duration.

The very mild diabetes of the obese adult, often discovered accidentally during routine examination, demands as careful and thorough training as the more severe case. If the mild diabetic is intelligent, he will cooperate and avoid the complications of his disease.

Dr. H. I. Reynolds, Athens: I have enjoyed Dr. McCurry's paper very much, and I wish to discuss only one phase of diabetic management. That is, in the class of patients who have a mild degree of diabetes. These patients come to the doctor's office. They do not have time to go to the hospital. They are working every day, and probably will not go to the hospital even if you insist on it, and in many instances it is not necessary for them to go. In diabetes the teaching primarily of dietetics rests upon the doctor, unless the patient is in the hospital so that the hospital dietitian can do it. The patients who come to your office must be taught by the doctor, and we must have some simplified method of teaching them. Most of them are totally unable to master, and will not try to master the metric system of weights and measures. They have forgotten, if they ever knew about it, and they must have a simple way to measure their diet. In the long run, the person who measures the diabetic diet is a housewife. I have found that by using instead of the metric system of grams and measures which they know nothing about, that we can simplify this a great deal by using a household measure, the half pint cup, the tablespoon, the teaspoon and so on. I do not wish to be misunderstood, the juvenile diabetic cannot be treated in this way, or the severe case, but if you have a patient with mild diabetes who is not able to afford a nurse in the home, which Dr. McCurry has and which is ideal, that patient can be taught to measure his food in cupsful and teaspoonsful, and success will be attained, whereas if you try to teach the metric system he will not follow instructions and you are doomed to almost certain failure. If you give him the measuring cup method I wish to refer you for this to the work of Dr. Olmstead, of St. Louis, who has worked this out. If you will obtain his book you will have success in practically all your mild diabetic cases.

Dr. Thomas E. Rogers, Macon: It is often difficult to get the necessary cooperation in these cases. One rule I make as soon as I have satisfied myself that the patient has diabetes is to tell him this: "You have a disease that will kill you, there is no question about that, but there are only two reasons why you will die. One is ignorance and the other is carelessness. Don't let us grow careless." There are two types of diabetes, the type that is mild, and a great majority of the patients come under this heading. I should say that three-fourths of the patients I see do not require insulin. In this type it

COARCTATION OF THE AORTA*

Report of a Case

L. MINOR BLACKFORD†, M.D.,

Atlanta

By the term coarctation of the aorta is meant constriction or obliteration of the aorta in the region of the insertion of the ductus arteriosus. It is believed to result from idiopathic maldevelopment in the second month of embryonic life. If the true anatomic isthmus is stenosed, the subject of the anomaly rarely survives the first year. In the so-called adult type, the type considered here, the lesion is at the distal end of the isthmus, that is, at or just beyond the insertion of the ligamentum arteriosum. In two recent comprehensive reviews^{1,2}, more than 200 cases with necropsy data have been studied. Of these twenty-one were diagnosed in life; fifty-seven other cases have been reported clinically. Four cases with necropsy and two with clinical data⁴ have been reported since these reviews, and personal communications to me have announced several others, which will probably be reported shortly. Two of these four patients died from subacute bacterial endocarditis⁶, one from acute bacterial aortitis⁴, and one from rupture of cerebral aneurysm³. They were all young adults³; three of them males.

Report of Case

A boy, aged 16 years, was brought to the Mayo Clinic June 6, 1928, for a study of hypertension. He was an only child and both parents were living and well; his mother said that her health had never been better than during the period of her pregnancy. The patient had had the diseases of childhood, malaria, and influenza three times; he had not had rheumatic fever or chorea and his general health had been good. A cardiac murmur was detected when he was a baby but little importance was attached to it by the attending physician. His mother had always been very solicitous about him and had had him examined at frequent intervals. He had

*This case was observed in the Division of Medicine, The Mayo Clinic on the service of Dr. George E. Brown. Submitted for publication July 6, 1928.

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Figure I
Collateral circulation in a typical case.
Note muscular development.



Figure 11
Typical case of collateral circulation. This boy had been restricted in activity and diet for four years on account of hypertension.

not recognized any symptoms referable to the heart although he had led a normal, vigorous, athletic life. In the autumn of 1927 he was examined again and considered fit to play football. At the close of the football season his blood pressure was determined for the first time, in the course of an examination for insurance. It was found to be high and a diet low in salt and protein was advised.

The patient was muscular and adolescent; he appeared to be in excellent health. The pupils reacted normally; the vessels of the fundus were somewhat constricted. The teeth were sound; the tonsils had been removed. The carotid arteries pulsated visibly, but pulsation in the subclavian arteries was stronger by palpation. The size of the heart was normal by percussion, and by roentgenogram, and fluoroscopically. Thrills were not palpable. A systolic murmur was heard over the whole precordium as well as to the left of the vertebral column at the level of the spine of the scapula; this murmur was rather harsh in the aortic area and the aortic second

sound was markedly accentuated. A diastolic murmur could not be heard in any position. There was a suggestion of pulsation on each side of the superior portion of the sternum, but other evidence of superficial collateral circulation could not be made out by palpation, nor was pulsation perceptible in the abdominal aorta or femoral arteries. In the right arm the systolic blood pressure was 176, the diastolic 96; in the left arm, 160 and 100; in the right thigh 100 and 94 (mercury sphygmomanometer.*) The lungs, genitalia, inguinal rings, extremities and tendon reflexes were normal. The patient was placed in hospital for more intensive study. Subsequent determinations of systolic blood pressure varied from 108 to 160 and diastolic from 70 to 90. The electrocardiogram showed rate 73, sinus arrhythmia, QRS-complex slurred in Lead III, slight left ventricular preponderance, notched P-wave in Lead II and inverted T-wave in Lead III. The hemoglobin was normal; the erythrocytes numbered 4,720,000 and the leukocytes 6,200. The Wassermann reaction on the blood was negative. A careful investigation was made to exclude renal disease. Repeated urinalyses were negative except for a slight trace of al-

bumin in one specimen. The phenolsulphonephthalein test was negative, and the blood urea on different days was 22 and 28 mg. for each 100 c.c. Dilution and concentration tests showed that the urine could be diluted to a specific gravity of 1.004 and concentrated to 1.031.

Following the diagnosis of coarctation, inquiry was made as to symptoms that have been attributed to this condition in certain other cases. A history of headache, epistaxis, cyanosis, tinnitus, subjective cardiac sensations, nocturia, intermittent claudication, pains in the back or legs, edema, or dyspnea could not be elicited, but the patient had observed that his feet became cold easily.

One of the most striking things in coarctation is the usual absence of symptoms until the final break. This case bears a striking resemblance to that of a football player of the same age already reported from the Mayo Clinic. The only material point of difference is that in the earlier case (Fig. 1) superficial collateral circulation was easily made out. In the seventy-seven cases of coarctation previously reviewed in which the diagnosis was made clinically, in seventy-five the pulsating superficial arteries were demonstrated. These arteries are illustrated by photographs of two boys, aged sixteen years², (Figs. 1 and 2). The vessels which palpated by several physicians, were outlined with paint on the patients' bodies. Two reports, however, have been found in which the diagnosis of coarctation was considered during life but abandoned because collateral circulation could not be demonstrated; in both the aorta was extremely stenosed and abundant intrathoracic anastomosis was present. In 1924 Woltman and Shelden made the diagnosis of coarctation clinically in the absence of superficial collateral vessels. More recently Laubry, in reporting a case diagnosed during life, has asserted that a marked disproportion between the systolic pressures in the arm and thigh is enough to establish the diagnosis.

It has been shown that more than 40 per cent of deaths associated with coarctation occurs between the ages of 15 and 30, often after violent exercise. Three-fourths of all deaths are due to cardiovascular causes; about half of these are from myocardial insufficien-

BERIBERI*

Report of a Case

C. T. NELLANS, M.D.,

J. C. MASSEE, M.D.

Atlanta

During the past ten years there have been few cases of Beriberi reported in this country. It is interesting to note that the last serious outbreak recorded was at a Charleston, S. C., convict camp, near where the following case originated:

CASE REPORT

On October 14, 1927, a 19-year-old colored boy was brought into the Federal Prison Hospital after having been in jail in Charleston, S. C., for five months. On admission he was unable to give a history because he could only speak in a whisper and that between gasps for breath. Admission physical examination showed a very uncomfortable negro boy propped up in bed, orthopneic and with generalized pitting edema. His weight was 167 pounds, although his best normal weight had previously been 133 pounds. His head, eyes (including ophthalmoscopic examination) nose, mouth and neck were negative except for the edema and the fact that he spoke only in whispers. His chest was symmetrical with even but shallow and rapid respirations. The lungs were resonant with normal breath sounds and an occasional crepitant rale at the extreme bases. No signs of fluid or consolidation were found. The heart was markedly enlarged to percussion despite the massive edema of the chest wall. The sounds were distant but of fair quality. There were no murmurs. The pulse rate was 120 per minute. The blood pressure was 110 systolic and 80 diastolic. Due to the marked edema of the abdominal wall nothing satisfactory was made out except a slight fluid wave. His liver and spleen were not felt. The genitalia were edematous. Rectal examination was negative. The extremities showed marked pitting edema but the knee jerks and ankle jerks were absent. The plantar reflexes were normal. Some weakness and stiffness of the legs was noted but thought to be due to the edema. The temperature was 95.6° on admission, but 100° eight hours later.

Laboratory examinations showed the following:

Blood—hemoglobin, 95.

Red blood cells, 4,030,000.

White blood cells, 18,250.

*Read before the Fulton County Medical Society, Atlanta, March 15, 1928.



Figure I
October 14, 1927



Figure II
March 1, 1928

Neutrophils, 85.
Small Lymphocytes, 9.
Large Lymphocytes, 5.
Large Mononuclear cells, 1.
Blood Wassermann, 4 plus.
Urine—Red, turbid, acid, specific gravity, 1.015.
Albumen and sugar negative. Rare hyaline casts and R B C.
Phenolsulphonephthalein excretion 50 per cent in two hours and ten minutes.
Stool—Negative. No parasites.
Repeated blood examination both by day and at midnight failed to show any evidence of parasites such as *Filaria*.

CLINICAL COURSE

He was immediately placed on Karrell diet and given digitalis folia 0.9 gm. (Squibb's) the first day. Mag. Sulphate 15 gm. each morning and Ammonium chloride 1.0 gm. four times daily were given preparatory to the administration of Novasurol. The following day he received Fisher's solution intravenously and digitalis folia 0.54 gm. The first day his fluid intake was 880 c.c., output 1060 c.c. The second day in addition to the Karrell diet he drank 300 c.c. from his hot water bottle, but voided only 450 c.c. The digitalis and ammonium chloride were continued. In addition pilocarpin and a hot pack were given on the third morning with no result except a further suppression of urine to 300 c.c. Venesection the third afternoon showed a thrombosis of the veins in the antecubital space, a rather large dissection being necessary to find a vein from which blood would flow. After withdrawing 400 c.c. the pulse dropped from 120 to 85, the temperature remaining about normal

and the blood pressure 108-56. The evening of the fourth day, after no urine had been passed for 24 hours, he voided 135 c.c. of very bloody urine containing rare hyaline casts and a trace of albumen. Gradually his urinary output increased. Digitalis was discontinued on the sixth day the ammonium chlorid and Novasural having been stopped with the onset of the hematuria.

On the seventh day the edema suddenly disappeared from his head, neck and one arm. On the eighth day his weight had dropped to 140 pounds. His N. P. N. was 150 milligrams per 100 c.c. and urine showed many hyaline casts but no blood or albumen. He continued to lose weight, his pulse ranging around 100 and his temperature rising daily to 101°.

The eighth day his diet was changed to soft solids with one orange daily. After fourteen days his urine showed numerous hyaline and granular casts, a trace of albumen and a phthalein excretion of 25 per cent. Signs of congestion began at the left base, the heart remaining large and hyperactive. In three days there were diminished tactile fremitus, dullness to percussion, and diminished breath sounds over practically the entire left chest. However exploratory puncture revealed no free fluid. These signs persisted.

After two weeks the edema had completely disappeared and it became apparent that the extensor muscles of the thighs and lower

legs were completely paralyzed and markedly atrophied. On the fifteenth day he had a convulsion which ceased after gastric lavage. Shortly afterwards he developed a bilateral wrist drop. He complained of no pain but seemed to have slightly diminished sensation in the lower extremities. His difficulty of speech continued as did the signs in the chest. Any exertion, even being propped up in bed would cause him to break out into a profuse sweat.

X-ray of chest 24 days after admission was reported as follows:

Left chest is completely obscured by a dense shadow. The homogeneity of this shadow is quite constant except in the second interspace. Outside the midclavicular line, where an area is seen which presents quite definite mottling, medial to which is seen an area somewhat denser than the rest of the shadows. This gives somewhat the impression of new growth.

Impression:

1. Fluid in pleural cavity.
2. Empyema.
3. Massive collapse of lungs.
4. Primary new growth of the left pleura.

Lumbar puncture 25 days after admission was negative.

The thirtieth day the diet was changed to general diet with one egg daily and after forty days to vegetable diet with eggs and citrus fruits.

In view of the edema and cardiac signs no anti-luetic treatment was given until the forty-ninth day when 0.3 gm. of Neo-Arsphenamine was exhibited, apparently causing no renal irritation. He had been receiving full doses of Fowler's solution since the twenty-fifth day with massage to legs and arms daily.

For two months his pulse continued to range around 120. After forty days the signs in his chest gradually decreased and disappeared. His weight had dropped to 101 pounds. After the fortieth day the weight gradually increased and there was a very gradual improvement in the use of the arms and legs although the tone and nutrition of the muscles remained very poor. After seventy days his pulse averaged 100; his weight was 113 pounds and he could feed himself. Gradually he was gotten up and has had a

steady drop in pulse to 80, with an increase in weight and strength. Now he weighs 118 pounds and is able to do a little cleaning, although his extensor muscles are still weak. Except for a paralysis of the left diaphragm his chest otherwise is negative. Phthalein excretion is 40 per cent in two hours and ten minutes. The urine is negative. Gastric analysis during convalescence showed normal acidity.

Since convalescence we have learned that his family history is negative. Four years ago he had an illness, presumably typhoid fever following which for two years he was unable to walk because of the left ankle being continually swollen and sore.

For five months before admission here he had been in jail where his entire diet consisted of boiled rice, hominy grits and white beans. He had fresh tomatoes once a week on Sunday during the summer months without other fresh vegetables, milk butter or meat. After being in jail for about three months, following a scratch, he developed a small pimple on his penis which persisted for one month. For three weeks before admission to the penitentiary he had felt himself gradually getting weaker with some pain and swelling of the legs and abdomen, and with increasing shortness of breath.

We present this case as one of Beriberi caused by the deficient prison diet and showing both the cardiac, dropsical and paralytic features of the disease.

ASCARIS LUMBRICOIDES INFESTATION WITH EXTREME ANEMIA

H. E. Bardenwerper, Milwaukee (*Journal A. M. A.*, Oct. 6, 1928), says that the presence of *Ascaris* in children may produce grave results. The blood picture must not be confused with that of pernicious anemia. Failure of hematogenic treatment to produce results should lead to intensified search for the cause of the anemia. Transfusion offers a readily available means of maintaining life in desperate cases till vermifuges may be brought into action. The possible present tendency to overlook worms as serious invaders, should be replaced by empiric treatment with vermifuges.

CONGENITAL HYPERTROPHIC STENOSIS OF THE PYLORUS*

A. R. ROZAR, M.D., F.A.C.S.,
Macon

In presenting this paper and reporting these few cases, my object is not to give you anything particularly original in the treatment of this condition, but to stimulate an interest in diagnosis and give these little sufferers the benefit of a most excellent remedy that has been discovered in the last few years. Undoubtedly, many die yearly undiagnosed and many others are allowed to die while being treated medically, that could be saved by surgical intervention. Just as diphtheritic antitoxin has turned the mortality table around in the treatment of diphtheria, just so has the Rammstedt operation turned it around in the treatment of this condition.

To quote Horsley: "A peculiar condition of the pyloric end of the stomach occasionally occurs. This is usually observed in infants from one to four weeks after birth. It consists of a great hypertrophy of the muscular coats of the pylorus and adjacent portion of the stomach—the pyloric canal."

It seems to be more frequent in males than in females, the ratio being about five males to one female, taking the average from the various series reported. Still says, in his observation: Four to one. In my cases there were three males and one female.

The pathology is abnormal development of the pylorus, especially its transverse muscular fiber. Boyd, in the 1925 edition of *Surgical Pathology*, says: "Pyloric stenosis of infants is a condition in which there is great obstruction at the pylorus in early life. It used to be thought that there was a congenital overgrowth of muscle at the pylorus, but it is now believed to be more probably secondary to pyloric spasm." To this a great many observers do not agree, for there are cases reported of marked stenosis in a six and seven months foetus.

The symptoms may appear in the first day or two of life, but in the average case

they first make their appearance about the fourteenth day. The most prevalent symptom is vomiting, which at first may attract very little attention, but this is persistent, usually unaccompanied by any other symptom except possibly constipation. This then is followed by a rapid loss of weight. At first the vomiting may be slight, but it rapidly grows worse and becomes of the projectile type, sometimes being thrown nearly across the room, and coming out of the nose as well as the mouth. In the beginning, the child usually vomits after each feeding, but as time goes on, the stomach will retain possibly two or more feedings, and then a great amount may be vomited at one time.

The baby appears to be ravenously hungry but after taking a few swallows of food, it will begin to squirm with pain due to the peristalsis beginning in the cardiac end of the stomach and meeting obstruction at the pyloric end. The child becomes emaciated and these peristaltic waves may be observed through the abdominal wall and constitute the most reliable symptom in making a diagnosis. Due to the dilatation of the stomach, the infant gives a full distended appearance in the upper part of the abdomen, and a sunken, emaciated appearance below the umbilicus.

In the right side of the abdomen, about midway the rectus muscle and half way between the costal margin and the umbilicus, can usually be felt a mass which feels very hard and which is about the size of the distal joint of the thumb—the hypertrophied pylorus. In most cases this can be felt, one author saying that it was definitely outlined in forty out of forty-two cases, but as a rule I hardly believe that it can be mapped out so constantly. If the vomiting continues to the point of beginning rapid loss of weight, and if the hypertrophied pylorus cannot be mapped out, the diagnosis should be verified by putting a catheter in the infant's stomach and giving barium and observing under the fluoroscope. I have resorted to this in two cases.

The treatment is purely surgical, and up to a few years ago when the Rammstedt operation was described, consisted usually of an

*Read before the Medical Association of Georgia, Savannah, Ga., May 10, 1928.

anterior gastro-enterostomy. The recoveries following gastro-enterostomy were less than 25 per cent, which is a very discouraging mortality.

The Rammstedt operation consists of making a small incision, going through the right rectus muscle at a point over the pylorus and delivering the pylorus through the incision. Then making a longitudinal incision through the peritoneal, and half way through the hypertrophied muscular coat, and then stretching the remaining fiber by means of the point of a hemostat thus releasing the mucus coat. Or by careful incision cutting down through the muscular coat. After this is done, the viscera is dropped back and the abdomen closed. The one danger is perforating the mucus coat.

A. A. Strauss has devised an operation similar to the Rammstedt in which he makes an incision about half way through this muscular coat, then dissects out the pylorus, working his way up to the normal muscular coat of the stomach, then dissecting under the hypertrophied fibers and cutting them thus removing the danger of perforating the mucus coat. He completes the operation by splitting a flap from the hypertrophied muscular coat and pulling it across the mucus coat and fixing it with a few interrupted silk sutures. He reports excellent results. In one hundred and three consecutive cases there were only three deaths. The Rammstedt operation is much quicker and if carefully done will give excellent results.

The four cases which I report only briefly are as follows:

Case 1. Baby E. B., female, age 5 weeks, admitted to hospital April 13, 1924. At the time of birth was a normal baby, weighing about seven and three-fourths pounds. Was breast fed and took and retained its nourishment until it was about three and one-half weeks old. It then began to vomit at intervals and after three or four days vomited everything. It showed marked emaciation. At the time it was admitted to the hospital, its weight was about the same as at birth. It was kept under observation for four days. A mass corresponding to the location of the pylorus was indefinitely map-

ped out. A barium meal was given through a catheter and observed under the fluoroscope, and nothing was seen to pass the pylorus. On April 17 a Rammstedt operation was done. The child made an uneventful recovery and was dismissed from the hospital on the ninth day. The child is now a well developed child and the report from its family physician a few days ago was that it was an unusually large child for its age.

Case 2. Baby C. H., male, age 6 weeks, admitted to hospital March 17, 1926. Its mother gave the following as its chief troubles: "He was very restless, he vomited everything that he took, and it came out through his nose and mouth with great force, and nothing passed through his bowels. At the time of its birth it weighed seven pounds and fourteen ounces. When one month old it weighed nine pounds and when admitted to hospital its weight was eight pounds and eleven ounces. Up to three weeks of age it took and retained its formulas, then began to vomit. It would take and retain two to three 3-ounce feedings and would then vomit the whole amount.

On examination after a feeding, the waves over the stomach could be distinctly seen; and on palpation a mass, in the region of the pylorus, distinctly felt. Examination under the fluoroscope showed the pylorus to be closed. He was operated on the day he was six weeks old. Discharged from hospital on the ninth day. He has been perfectly healthy since and on April 4, 1928, his weight was thirty-four pounds.

Case 3. Baby H. K., male, aged 5 weeks, admitted to hospital August 2, 1926, with the history that it was a normal baby up to three weeks of age. It then began to vomit its feedings and rapidly lose weight. The parents had been married for about nine years and this was the first baby. A diagnosis of pyloric stenosis was made and operation advised. The mother feared operation very much and requested that it be treated medically. It was given the usual atropin treatment with no improvement, but instead, became much more emaciated. On August 10 it was operated on and did well for five days, when it was noticed that the dressing was

soiled with a bloody serum. It was dressed and found that the wound had opened up its entire length exposing the intestines. There was apparently no infection, but the wound gave no evidence of any attempt at repair, the silk worm sutures cutting through the skin. The margins of the wound were freshened up and the incision closed again. This time the deeper structure held, and the superficial tissues granulated up. On December 24, 1927, the mother reported the baby to be normal and a well developed child.

Case 4. Baby T. C. K., male, age 2 weeks, admitted to hospital February 14, 1928. Was a normal baby, retained all of its food until eighth day when it began suddenly to vomit all of its feeding. This continued for four days. It was taken off of breast milk and put on modified cow's milk with no improvement of symptoms. Physical examination of the abdomen showed it to be tense and distended in the epigastric and right hypochondriac region. There was apparently no tenderness on pressure. There was a small mass in the right hypochondriac region corresponding to the location of the pylorus. Below the umbilicus the abdomen was flat.

This baby was operated on February 15, 1928, at the age of fifteen days. It made a splendid recovery except there was delayed union in the skin and superficial fascia without any apparent infection. It began to take and retain its nourishment and gain weight, after this the wound began to granulate freely. No report since two weeks after operation.

It will be noticed that in these last two cases there was a delayed healing of the wound. In my opinion, this was due to the starved condition of tissues and not to infection.

In conclusion, let me make a plea for careful examination of infants from the age of two to six weeks that have constant and projectile vomiting. Do not take it for granted too long that it is due to improper feeding. Many writers speak of the number of these babies that come to autopsy undiagnosed. Again, if you suspect pyloric stenosis, do not procrastinate too long hoping that atropin will cure them. There is the spas-

modic type, but if the symptoms do not remit, you are probably dealing with the hypertrophic type and surgical intervention should be resorted to before your little patient is too much exhausted.

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DISCUSSION ON PAPER OF DR. ROZAR

Dr. C. W. Roberts, Atlanta: We are indebted to a great American physician, William Osler, who in the exercise of one of the many admirable attributes he possessed, discovered that a New England physician, Dr. Beardsley, in 1785, accurately described this disease. You will see that for more than 140 years this interesting condition has been definitely understood and its clinical and pathological features correctly interpreted.

As to incidence, it is looked upon as being a rare disease, and yet you heard the statement made on this floor this morning that about 70,000 babies are born in Georgia each year. The statistical incidence of this disease is about 5 per thousand of children born, so there probably are from 300 to 350 cases of congenital pyloric stenosis in Georgia each year but we do not hear of any such large number. Dr. Rozar has reported four. I operated five and have seen a few in consultation. Several other Georgia physicians have observed and reported cases. Essential pathology is the piling up of the circular muscle bundle at the pyloric area. As Dr. Rozar said, most cases are seen early, usually at about ten days to three weeks. I operated on one case forty-eight hours after birth and found a rather typical picture such as we see later. The cause of the condition is unknown, but it is thought to be a work hypertrophy of the pyloric muscle.

The symptoms Dr. Rozar has so well described are due to blockage of the outlet of the stomach, the vomiting being explosive in type, the patient withering away and dying from starvation. This typical clinical picture should make the diagnosis. There is no reason why the diagnosis should be missed particularly if one has once seen a case. Waves traveling across from left to right in the epigastric area is a striking symptom. The tumor may be felt but this is not necessary to a diagnosis. The disease is usually seen in a boy child coming ten days to two weeks after birth and in a child who is not otherwise sick. The mother will tell you that

the child cannot retain anything it takes, and that should give you a clue.

As to whether it is a medical or surgical condition we cannot say definitely. We can only say that these cases should be observed by a pediatrician who is willing to associate a surgeon. Just how big a percentage of the cases will have to be operated on to avoid a fatality we do not know. To separate the medical from the surgical cases, Dr. Holt says if you weigh the baby when it is first seen, and then weigh it ten days later and find that in the meantime the baby has lost more than 20 per cent of its weight, the case should go to surgery. Dr. Strauss has given us a more elaborate way of determining this by telling how much of a barium meal passes through in a certain time. This method is impractical for the average physician. If the child has not lost tone in the stomach musculature then response to operation is highly satisfactory.

I wish to stress in conclusion that the Fredet-Rammstedt operation may be done within a period of fifteen minutes under local anesthesia, the patient being able to leave the hospital in five to six days, and that a cure may be expected in a high percentage of cases seen before starvation and acidosis add insuperable complications.

Dr. O. H. Weaver, Macon: The essayist and Dr. Roberts have so well covered this interesting subject that there is little left for me to say, but there are a few points which I wish to emphasize. They have mentioned that the most frequent symptoms in this condition are easily recognized. There would appear to be no good excuse for the lack of recognition if the physician is on the alert. The symptomatology, as has been stated, is characteristic and by the observation of these symptoms which require no laboratory equipment, although the x-ray plate may be more or less confirmatory, the diagnosis can be made. All of these cases should be recognized and given proper treatment. The histology of the condition, to those of us who have had the experience of observing and cutting into this dense cartilaginous obstruction, makes it hard to conceive how we can get any relief of the condition by drugs. However, I am not prepared to say that some of these cases do not respond to medical measures. Some very excellent gentlemen insist that medicine will cure all of these cases, atropin, lavage and so on, and we cannot disregard their opinion. The condition has been not inaptly compared to the obstruction from the enlarged prostate,

it being muscular tissue in one and glandular tissue in the other. However, there are the same dense fibers that surround the urethra and the pylorus. I believe the cases are both medical and surgical, but the important thing is not whether the condition will be relieved and the hypertrophy will be absorbed and removed, but whether or not the baby will live long enough under medical treatment for this to take place. I think the patients should be carefully observed by a pediatrician, who is better prepared to watch the baby, and the weight feature which Dr. Roberts mentioned is an important thing. Dr. Strauss mentions the fact that the barium meal gives an excellent indication for operation. He takes 50 per cent of the barium passing through after four hours as a criterion. I do not think this is definite unless other symptoms loss of weight and so on are present. The few cases I have had an opportunity to operate upon, ten in number, were all cases which had been treated with atropin, diet and lavage, and the babies were continuing to lose ground before I saw them. They were all typical cases and there was no mortality in the series. The Rammstedt operation was used in all cases. I regard it as the quickest and simplest, although it does appear to be an unfinished surgical procedure.

I would like to call attention to something as a precautionary measure. In cutting through the thickened muscle there is danger of cutting into the duodenum. I cut into the first one I operated upon, but a stitch took care of it nicely and no trouble resulted.

Dr. Charles Usher, Savannah: I want to thank the doctor for his paper, and as Dr. Weaver said, he about covered the ground. In 1787 Hezekiah Beardsley observed the first case, and called it "Schirrus of the Pylorus In An Infant." Sometime later Walboch and Dent proved that the disease was not acquired after birth, but was congenital, because they found it in a fetus. A hundred years later Hirschsprung added greatly to our knowledge of this disease. There are two very important points in making the diagnosis: No bile is vomited and very little if any food is passed by rectum. The etiology of the disease is unknown and the pathology is an open question for discussion. The treatment is also a debatable subject. Fifteen years ago there were more operations than now. Pediatrics have made great progress during this time and that is probably the reason these patients are cured before they come to operation. Congenital pyloric stenosis calls for both medicine and surgery, and be-

fore and after operation it is advisable to have a skilled pediatrician treat these cases.

I wish to report one case. On September 26, 1927, I saw an infant, aged one month. At birth the child was normal in every respect, but in about ten days it began to vomit, and became progressively worse. The condition was thought to be syphilitic, and was so diagnosed. The child did not improve and its parents went to another hospital and consulted another physician. I was called to operate on September 26, and found a greatly emaciated baby, weighing probably six or seven pounds. We did a Rammstedt operation under novocain infiltration. Post-operatively we gave saline and glucose under the skin, and for five days gave 50 c.c. of the father's blood, also subcutaneously. There was a stormy convalescence. The feedings were directed by a skilled pediatrician, without which I greatly doubt if the child would have recovered. On May 1, 1928, the mother reported that the child is fat, in every way in good condition, and looking like a normal baby of its age.

I did the same thing Dr. Weaver reports doing. It is said that the dividing line between doing a complete operation and a poor operation is very narrow. If you do not cut enough you will not do a complete operation, and if you cut too much you are very likely to get into the pylorus. In my case I closed the tissues with a stitch and put a little piece of muscle in it and closed over that.

Dr. Robert L. Rhodes, Augusta: I think the first case of this type that I ever saw was in 1915, and the first one I saw in Georgia was in 1920. The thing I wish to emphasize particularly is that we should do something before these little fellows have lost tone. One case brought this out definitely. There was a definite history which extended over several days before the child was seen by a physician who recognized the possibility of a hypertrophic stenosis. He sent the child to the hospital and I saw it in consultation. I found a flaccid abdomen, and the vomiting was only regurgitation—not projectile. There was no peristaltic wave to be seen after careful observation by the hour for several days. On the day of admission we made a fluoroscopic examination, which showed that after four hours practically nothing had gone through in this case, but this was due to lack of tone.

"Strauss claims that if eighty per cent of the barium has passed through the pylorus at the end of four hours, the case can, as a rule, be cured medically."

You may not see the projectile vomiting, or the wave because of loss of tone. What you must do then is to try to get the child back somewhere near normal. Give them fluids. In this case we gave fluids intravenously, subcutaneously and intrarectally until the tone was brought back up, and then we got the definite projectile vomiting and the peristalsis, as many as four at a time. In that case was the largest mass I have ever seen. The stenosed muscle was $1\frac{1}{4}$ inches broad, but it could not be palpated because it was way down by the side of the spine and it was impossible to deliver it out of the wound. I had to force my fingers down underneath and hold it while I made the incision.

I wish to emphasize a point that was brought out by Dean Lewis a few years ago, of not just cutting the muscle but spreading the cut edges apart, converting it into a "U."

Another important thing is to begin feeding these babies as soon as they get back from the operating room. Give small quantities and rapidly increase just as fast as they will take it.

Dr. Lawrence Lee, Savannah: I have little to add but have found one thing to be of service in operating on these cases, and that is that a few whiffs of ether will save a lot of time and keep the child from having any shock. I have operated on five or six of these cases and a little ether will relax the child nicely and put it to sleep, and save ten minutes in the duration of the operation, without doing any harm.

Dr. A. R. Rozar, Macon (closing): I wish to thank the gentlemen for their discussion. As to anesthetics, I wish to say that all my patients were operated under ether. The local may be the ideal method, but I prefer to have the children under general anesthesia with a good anesthetist.

In regard to waiting too long before operating, that is the thing I tried to emphasize. There is the spasmodic and the hypertrophic type of case. When you once cut through one of these gristly masses it is hard to see how medicine will ever relieve the condition. I think it is the spasmodic type of case that is relieved by atropin and belladonna. If you wait until they have lost their tone you usually lose your patient.

Following exposure to an infected rabbit, a typical cold developed in a human being which was apparently caused by *Bacillus bronchisepticus*.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

OCTOBER, 1928

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Articles are accepted for publication on condition that they are contributed solely to this Journal.

Manuscripts should be typewritten, double-spaced, and the original (not the carbon copy) submitted. Used manuscript is not returned unless requested.

Communications and items of general interest to the profession are invited from all parts of the State. We especially invite county society secretaries to send us information of happenings in the county that would be of interest to the members throughout the State.

Reprints should be ordered within 30 days after the appearance of an article, since all type will be destroyed at the end of that time.

Editorial Department**WHAT SHALL WE DO FOR THE
MIDDLE CLASS PATIENT?**

Hospital Management for August, 1928, has an interesting article entitled, "This Hospital Makes Real Effort to Serve the Middle Class Patient," by Miss Agnes P. McGinley, R.N., Superintendent of the Athens General Hospital (Georgia), in which she describes the effort being made by this hospital to answer the above question. In commenting on the article, the editor states: "While many hospitals have been asking themselves this question, the Athens General Hospital has been doing something. It has established a special bed rate, and with the cooperation of its staff has fixed the limits for medical fees for the professional care of the part-pay group. This latter innovation will attract a great deal of attention."

In the outset it is made plain that this in

no way affects the regular private-pay patient. This is a county-owned institution which admits three classes of patients: (1) *private*, (2) *part-pay*, and (3) *charity*. The part-pay service avoids pauperizing those who are unable to pay the regular hospital and medical fees and at the same time gives them the benefits of modern hospital care.

The following are examples of the new part-pay rates: "Operative: Patients admitted to ward for period not to exceed fourteen days for \$30 (Total hospital charge). Doctor's fee not to exceed \$35.

"Medical: Patients admitted for period not to exceed fourteen days for \$25. Doctor's fee not to exceed \$15.

"Obstetrical: Patients for not more than twelve days, \$15. Doctor's fee not to exceed \$15."

A regular schedule is proposed for those cases which require longer hospitalization. The article continues: "The results of this new service have meant better cooperation from our staff and the community has benefitted far beyond any expectation of staff or hospital managers. The people we are reaching and benefitting were not within our reach and would never have been hospitalized if it were not for our part-pay plan."

This interesting experiment by a Georgia hospital will be watched with a great deal of interest by all those interested in the question, "What shall we do for the middle class patient?" The community, the hospital and the medical profession must cooperate to bring about a just solution of this problem.

ON TO ASHEVILLE!

The twenty-second annual session of the Southern Medical Association will be held in Asheville, N. C., from November 12th to 15th. One of the best programs in the entire history of the Association has been arranged. This is a democratic organization in which each state composing its territory has equal representation on the governing body—the Council. As has been so aptly stated, it is *in the South, of the South and for the South*. Let us give it the support it so richly deserves by going to Asheville with a large delegation from Georgia.

WANTED: BLACKSMITHS AND DOCTORS

In a recent editorial *The Savannah Morning News* calls attention to the shortage of blacksmiths and doctors in the following words: The country needs and lacks blacksmiths and doctors. There is an apparent over-production of lawyers; there are enough preachers in most areas, there is even a promise of enough members of the teaching force to do pretty good work. There are plenty of men and women in many of the professions and callings—but the country is now needing blacksmiths and doctors.

THE NEW YORK MEDICAL CENTER

The project of a medical university center, started eighteen years ago by such well known figures as Dr. Samuel Lambert, Dr. Joseph A. Blake and Dr. Theodore Janeway, is now nearing completion. The Medical Center, New York, was dedicated to the service of humanity and the progress of science on October 12th before many thousands of guests. During the spring and summer there have been a succession of removals and openings at the Medical Center. This ceremony marked the beginning of the united efforts as a teaching and research combination. Following the dedicatory services inspection of the College of Physicians and Surgeons, the Vanderbilt Clinic and the School of Dental and Oral Surgery was made. Visitors were not admitted to the Babies Hospital, the Neurological Institute, or the New York State Psychiatric Institute and Hospital as they are still in the hands of the builder. January first is the tentative date made for the occupancy of these buildings.

BETRAYAL OF CONFIDENCE

Aside from the loathsome and penetrating odor of the American skunk, it is a very charming animal. Its beautiful fur markings and its habits of life, when undisturbed, are very attractive, but its odoriferous method of defense sets it apart as a feline to be feared and shunned.

We found such a creature at the Yellowstone Park meeting, but it was not the neat little black and white animal of our boy-

hood days. It appeared in the form of a big man in avoirdupois, but a skunk in disposition.

Invited to present a paper as an honored guest, one of the speakers appeared and was given the attention he deserved. Then he reverted to type. The air has ever since fairly reeked with his evil smelling odor. He rushed to some inexperienced or palm itching son of the pen who broadcasted, through the Associated Press, ideas he never dared express in the Tri-State Meeting. Apparently he was their author. The Rocky Mountain region was flooded by his self praise. He made no new discoveries but tried to make an advertisement of his appearance on the Tri-State Program. Such unethical conduct is its own condemnation.

EARL WHEDON, M.D.

Wyoming Medicine, October, 1928.

PACKAGE LIBRARY SERVICE

In order to facilitate the Package Library Service for our members which was announced some time ago, the following statement, including a copy of the rules, has been issued by The A. W. Calhoun Medical Library:

As an outgrowth of reference and lending services, The A. W. Calhoun Medical Library of Emory University has collected published material, in the form of reprints and periodical articles, on many phases of medicine and surgery. This material will be loaned to members of the medical profession for a small charge covering merely the cost of collecting the items and the postage from the Library to the borrower. The collection does not contain articles on highly specialized subjects or articles in foreign languages.

The following is a list of rules governing the package library:

1. Requests for packages should be addressed to: The A. W. Calhoun Medical Library, Emory University, Emory University, Ga. (M. Myrtle Tye, Librarian.)
2. Only one package may be borrowed at one time.
3. Twenty-five cents in stamps must be enclosed to cover postage from the Library

to the borrower and part of the expense of collecting the material.

4. Packages must not be kept longer than two weeks.

5. The borrower is responsible for the return, in good condition, of all packages and items contained therein. The actual cost of replacing such items as may be lost must be borne by the borrower.

6. When returning the package, tear off the address slip sent with the package and paste on the wrapper. Please notify the Library when the package is mailed back—a postal card is sufficient.

GEORGIA'S MEDICAL COLLEGE AND ITS OPPORTUNITY

Dr. Joseph P. Bowdoin, Deputy Commissioner of Health for Georgia, gave *The Savannah Press* an interesting and illuminating interview a few days since on the disappearance of the country doctor in Georgia.

Dr. Bowdoin informed *The Press* that the rural counties have relatively fewer physicians nowadays than ever before in the history of the state, there being approximately 500 less physicians in Georgia than there were two years ago.

The Press, after expressing its editorial surprise at Dr. Bowdoin's statement, naturally deplored the situation set up and thinks something should be done about it.

Of course, *The Press* is correct; something SHOULD be done about it!

And one of the things that might be done about it is for the state to extend a far larger measure of maintenance and support to the Medical Department of the University of Georgia in Augusta than in the main it has heretofore—although the Legislature assembled last summer did give the medical college something of a lift.

The *Atlanta Georgian* some two years ago in pleading for more adequate support for the medical college in Augusta, called attention to the facts as set forth by Dr. Bowdoin in his Savannah interview; stating among other things then that doctors were dying in Georgia at that time faster than they were being graduated from Georgia's two medical institutions—the one in Augusta referred to above

and the splendid medical school at Emory in Atlanta.

Not only is the supply of doctors unequal to the demand in Georgia, but the margin between the two constantly is widening.

It does not answer the problem at all to call attention to the fact that because of the automobile and the bettered road conditions, doctors are inclined to live in the cities rather than in the rural communities. There is nothing much in that as it affects this deplorable situation.

The basic trouble is that we are not educating and preparing for the practice of medicine and surgery in Georgia a sufficient number of young men to take the places of the older doctors as they pass out, either by death, retirement or removal from the state.

Of course, the doctor in his automobile nowadays may cover more territory and look after more patients than the old-time country doctor with his horse and buggy was able to a quarter of a century or so ago; but that gets you nowhere, because there are so many more people to serve.

The truth of the matter is, the Georgia Legislature should take very seriously to heart the status of its present medical college at Augusta and give it far more support than it is receiving.

It is one of the best medical colleges in the nation and is so rated. Its standard has been raised to where it is side by side with the A-1 colleges. It has a splendid faculty, and it works in perfect harmony and co-operation with the City of Augusta and its hospital. The medical college at Emory enjoys a like high standing.

There are no better medical colleges anywhere in the United States than the one at Emory and the one in Augusta. The one in Augusta belongs to the State of Georgia; it has a wonderful opportunity for service—and it is eager to assume the duty and responsibility thereof.

The Georgian believes that if every member of the incoming Legislature will fully inform himself as to the medical college, the Legislature will not hesitate to enlarge greatly its present appropriations for its support and extension.—Editorial, *The Atlanta Georgian*, October 8, 1928.

District and County Societies

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1928 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 20, 1927.
2. Turner County, Dr. J. H. Baxter, Ashburn, November 15, 1927.
3. Terrell County, Dr. Logan Thomas, Dawson, December 1, 1927.
4. Pike County, Dr. M. M. Head, Zebulon, December 3, 1927.
5. Ben Hill County, Dr. L. S. Osborne, Fitzgerald, December 8, 1927.
6. Evans County, Dr. S. T. Ellis, Claxton, December 20, 1927.
7. Taylor County, Dr. J. C. Hind, Reynolds, January 3, 1928.
8. Jasper County, Dr. E. M. Lancaster, Shady Dale, January 6, 1928.
9. Talbot County, Dr. C. C. Carson, Talbotton, January 28, 1928.
10. Wayne County, Dr. M. N. Stow, Jesup, February 9, 1928.
11. Elbert County, Dr. B. B. Maddox, Elberton, March 1, 1928.
12. Lamar County, Dr. Jno. M. Anderson, Barnesville, March 6, 1928.
13. Terrell County, Dr. Logan Thomas, Dawson, March 7, 1928.
14. Stephens County, Dr. C. L. Ayers,

Toccoa, March 8, 1928.

15. Upson County, R. L. Carter, Thomaston, March 15, 1928.

16. Crisp County, Dr. J. N. Dorminy, Cordele, April 5, 1928.

17. Henry County, Dr. H. C. Ellis, McDonough, April 10, 1928.

18. Dougherty County, I. M. Lucas, Albany, June 6, 1928.

19. Dooly County, Dr. F. E. Williams, Vienna, June 29, 1928.

20. Macon County, Dr. C. P. Savage, Montezuma, June 29, 1928.

21. Stewart-Webster Counties, Dr. J. M. Kenyon, Richland, June 29, 1928.

22. Sumter County, Dr. Henry A. Smith, Americus, June 29, 1928.

23. Emanuel County, Dr. R. C. Franklin, Swainsboro, July 3, 1928.

24. Rabun County, Dr. J. A. Greer, Clayton, September 18, 1928.

DISTRICT HONOR ROLL

1. Third District, Dr. G. Y. Moore, Councilor, Cuthbert, June 1, 1928.

1929 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 6, 1928.

NEW MEMBERS FOR 1928

Aiken, W. W., Lyons.
 Blackford, L. M., Atlanta.
 Brannen, Cliff, Atlanta.
 Calhoun, A. W., Atlanta.
 Carothers, J. B., Atlanta.
 Daniels, Chas. W., Atlanta.
 Ellis, J. N., Atlanta.
 Fort, Lynn, Jr., Atlanta.
 Hines, J. H., Atlanta.
 McCoy, W. R., Folkston.
 Nall, J. D., Atlanta.
 Peacock, T. G., Thomaston.
 Pittman, J. L., Atlanta.
 Quillian, B. O., Willacoochee.
 Sanders, Laetus, Commerce.
 Vernou, Eugene R., Atlanta.

Allen, Mashburn, Bryson, Gibbs, Sharp and perhaps others.

A resolution was unanimously passed opposing any change in the plan of electing the members of the State Board.

Mr. Secretary Bunce, we missed you. Don't slight us any more.

J. C. BENNETT, M.D.,
Secretary-Treasurer.

TERRELL COUNTY MEDICAL SOCIETY

Dawson, Ga., Sept. 12, 1928.—The society held its regular monthly meeting in Dawson Monday afternoon in the spacious suite of offices of Dr. S. P. Kenyon. Dr. J. A. Redfearn, of Albany, councilor for the Second District of the Medical Association of Georgia, was our guest. Dr. G. Y. Moore, of Cuthbert, was also a most welcome visitor.

The society was called to order by the vice-president, Dr. J. G. Dean, of Dawson, our president, Dr. S. P. Kenyon, being absent. Dr. Redfearn delivered a most interesting and instructive address on "Diabetes," bringing out many valuable points in the treatment and management of that very common and troublesome disease. He also described a case of Malta fever that had come under his observation and care through consultation; a little girl who developed the disease in Miller county a few miles below Colquit, Ga. The disease takes its name from an endemic febrile disease originating in the Isle of Malta, from whence it has spread in epidemic form along the shores of the Mediterranean Sea to India, China, crossing the Atlantic to the West Indies, Brazil and Porto Rico, making its first appearance in this country at Philadelphia in 1898, being brought here by a U. S. soldier, who had been doing military service in Porto Rico. A number of cases of this fever have in recent years developed throughout the Southern section of our country. Malta fever runs a very protracted course, lasting from two to six months.

The disease is caused by drinking goat's milk or milk from cows running in the same pasture with infected goats, a practice that is very common throughout this and adjoining states.

Interesting talks and case reports were made by Dr. Dean, Dr. L. Lamar, Dr. Guy Chappell, of Dawson; Dr. J. T. Arnold, of Parrott. Dr. Kenyon arrived from Atlanta just a few minutes before adjournment and made an interesting and pleasant address. Dr. Kenyon was accompanied home by his wife, who was recently operated upon at an Atlanta Sanatorium for mastoiditis. Mrs. Kenyon's

NINTH DISTRICT MEETING

Jefferson, Ga., Sept. 20, 1928.—The fortieth semi-annual session of the Ninth District Medical Society met at the Dixie-Hunt Hotel, in Gainesville, the 19th, instant. The president, Dr. Grady N. Coker, of Canton, presided. Invocation by Dr. A. D. Wauchope, pastor of the First Presbyterian Church. Welcome address by Hon. O. A. McDermid, head of the Chamber of Commerce, and response by Dr. Hubbard, of Commerce.

The scientific program included an address by the president, subject, "The Educational Value of the Medical Society, Primary Caution," Dr. C. L. Ayers, of Toccoa, vice-president and councilor; Dr. C. K. Sharp, president, Medical Association of Georgia, was present, and spoke of the importance of organization, medical literature, work of the State Board of Health, etc. Dr. Charles E. Waits, of Atlanta, chairman of the committee on Public Policy and Legislation, presented a paper on the Surgical Treatment of Hyperthyroidism.

Altogether, the papers and discussions were par excellent, and a profitable day was spent. This was the first visit for Drs. Sharp McGarity and Waits, and we trust they will come again.

The Ladies Auxiliary also met, presided over by Mrs. Ralph Freeman, of Hoschton. We understand Drs. Sharp and Winchester addressed them, and others.

About forty doctors and twenty ladies were present. At two o'clock a nice luncheon was served by the hotel. The next session, third Wednesday in March, 1929, will be held at Gainesville.

Among those joining in the discussions were Doctors Blackford, Glidden, Waits, McGarity, Ayers, Coker, Winchester, L. C.

many friends will be glad to know that the operation was a success and that she is convalescing nicely at their palatial home on East Church Street.

A large majority of our physicians are manifesting great interest in our county medical society meetings and while all our doctors are a very busy lot of men, all engaged in active practice, yet most of them make arrangements to attend their regular monthly society meetings.

We would like to say that "our grand old man" of medicine, Dr. J. G. Dean, here in Terrell County, and also an ex-president of the Medical Association of Georgia, who suffered a serious sequel from an attack of influenza this spring, and who was for quite awhile a very sick man, is getting stronger, gaining in weight and looking fine, attending to business and says he feels fine and dandy, and let me say to you, Doctor, "here's to your health," and in the words of the retrospective Mr. R. Van Winkle, "may you live long and prosper."

LOGAN THOMAS, M.D., *Sec'y.*

LIQUID PHENOL FOR HYPODERMATIC NEEDLE

A. A. Barge, M.D.,
Newnan

For convenience, have a small bottle filled with liquid phenol and stoppered with a cork. When the syringe is filled and the air expelled from it then turn the cork end of the phenol bottle down so as to wet the small end of the cork with the phenol, then withdraw the cork and be sure to wet the needle thoroughly with the phenol, replace the cork in the bottle, and inject the needle without any preliminary cleaning of the arm or part of the patient's body selected for the injection. No after treatment is necessary. The phenol disinfects the needle, kills all germs that may be carried to the needle before reaching the patient's arm for injection and disinfects the point where the needle enters the patient's skin. In emergency cases it is ideal, since it does the work of iodine, chloroform and alcohol in preparing the patient for the needle. It works in infancy and in old age.

Never sling off nor wash off the phenol from the needle after wetting it with phe-

nol, but let the needle carry all the phenol it will to the point of skin to be injected.

To withdraw medicine from a rubber covered bottle as in typhoid vaccines, all that is necessary is to wet your needle with phenol, puncture the rubber, withdraw your vaccine, wet your needle with phenol, inject the vaccines into your patient.

After twenty-five years' experience without a single failure I feel safe in offering this method.

SOCIETY CONDEMNS "EXPERT" TESTIMONY

The house of delegates of the Missouri State Medical Association, in annual session, May 16, adopted a resolution condemning the practice of expert testimony both by the state and by the defense in criminal cases in which insanity is a plea. The reference committee which recommended this resolution also recommended that the by-laws of the association be amended and that any member violating this portion of the by-laws be amenable to the board of censors of his society for unethical conduct. The report of the committee was adopted.

CHIROPRACTOR FINED

On complaint of the state board of medical examiners, Chiropractor C. L. Davis, of Van Nuys, Calif., was recently arrested on a charge of practicing medicine without a license. He was fined \$100 and sentenced to ninety days in jail. The jail sentence was suspended. Chiropractor Davis was ordered to report every two months for two years to the state board of medical examiners.

APPONTMENTS TO GEORGIA BOARD

Dr. R. F. Wheat, Bainbridge, and Dr. T. J. McArthur, Cordele, have been appointed members of the Georgia state board of medical examiners.

YET HE WAS A PHYSICIAN

Because he was "tired of this monotonous routine," a physician in a Pennsylvania town ended his life the other day. He had found in the human spectacle merely an unchanging series of events, dull and uninteresting, empty of inspiration and surprise.—Rome News-Tribune.

BOOK REVIEWS AND ABSTRACTS

Mark S. Dougherty, M. D.
Department Editor

Diagnosis of Disease, by Hobart A. Hare, Lea & Febiger, Philadelphia, 1928.

The old fashioned practitioner had to use his five senses in the diagnosis of disease where the modern doctor is apt to rely on the laboratory for his conclusive tests. The extent to which one relies on methods of precision in diagnosis is often unrealized until they are available. In his book, "The Diagnosis of Disease," Dr. Hare has arranged symptoms and signs of abnormal physical states in different regions of the body as they may be observed by the five senses, rather than as typical syndromes characteristic of specific disease entities. This method of discussing symptoms and signs under the region of the body in which they occur is very convenient in differential diagnosis. For instance, the introductory chapter on general diagnostic considerations gives some valuable hints as to the art of observing the patient, and the interpretation of peculiarities of constitutional types, as well as the methods of examination. Then follows immediately a chapter on diagnostic hints that may be gained by a study of the face and head. Next the hands and arms are considered, then the feet and legs with their peculiarities of gait, structure and sensations which are of diagnostic import. A long chapter is devoted to the study of skin, its color, eruptions, sweating, dryness, oedema, anesthetics, paresthesias, etc., while the mouth and tongue are fruitful sources of valuable diagnostic aid. Each region of the body is studied in detail.

The concluding chapters of the book are concerned with the consideration of major symptoms such as fever, convulsions, headache, pain, sputum, reflexes, etc. The discussions are very well done. As to the physical make up of the book itself, it is of a very convenient size, not as bulky as many medical texts, and of pleasing appearance. It is well indexed and contains numerous helpful illustrations. However, the use of italics to offset important symptoms being discussed in the text is probably not as clear as the use of heavy black-faced type would be.

J. C. MASSEE, M.D.

The Heart in Modern Practice, Diagnosis and Treatment. By William Duncan Reid, A.B., M.D., Assistant Professor of Cardiology, Boston University, School of Medicine, etc. Eighty-one illustrations, 464 pages. Second edition, revised and enlarged, J. B. Lippincott Company, Philadelphia and London. In this book the present knowledge of heart disease and its treatment is admirably presented. Dr. Reid classifies heart disease according to etiology, structural lesions and physiology. He also includes the classification of heart disease that is recommended by the American Heart Association. Considerable space is taken up in the discussion of cardiac arrhythmia. This is prob-

ably the best part of the book. Numerous illustrations are used, particularly electrocardiograms, which enhance the value of the book greatly.

MARK S. DOUGHERTY, M.D.

BOOKS RECEIVED

Diseases of the Gall Bladder and Bile Ducts. A book for practitioners and students, by Evarts Ambrose Graham, A.B., M.D., Professor of Surgery, Washington University School of Medicine, St. Louis; Surgeon in Chief, Barnes Hospital and St. Louis Children's Hospital. Warren Henry Cole, B.S., M.D., Instructor in Surgery, Washington University School of Medicine; Assistant attending Surgeon, Barnes Hospital and St. Louis Children's Hospital. Glover H. Copher, A.B., M.D., Assistant Professor of Surgery, Washington University School of Medicine. Sherwood Moore, M.D., Professor of Radiology, Washington University School of Medicine; Director of Mallinckrodt Institute of Radiology; Radiologist to Barnes Hospital and St. Louis Children's Hospital, Shriners' Hospital and St. Louis Maternity Hospital. Contains 477 pages, illustrated with 224 engravings and 8 colored plates. Publishers: Lea and Febiger, South Washington Square, Philadelphia. Pennsylvania.

Diseases of Infants and Children, by Henry Dwight Chapin, A.M., M.D., Emeritus Professor of Medicine (Diseases of Children) at the New York Post Graduate Medical School and Hospital; Medical Director of the Speedwell Society; Consulting Physician to the New York Post Graduate Hospital, et. al., and Lawrence Thomas Royster, M.D., Professor of Pediatrics and head of the Pediatric Department of the University of Virginia. Sixth Revised Edition. The rapid advances constantly made in all branches of Pediatrics call for frequent revisions and additions to works devoted to this subject. This has required much re-writing of the present edition and an elaboration of many of the articles. Publishers: William Wood and Company, 156 Fifth Avenue, New York City. Price, \$7.50.

Diseases of the Ear, Nose and Throat, Medical and Surgical, by Wendell Christopher Phillips, M.D., Ex-President of the American Medical Association, formerly Professor of Otology, New York Post Graduate Medical School and Hospital; Surgeon to the Manhattan Eye, Ear and Throat Hospital et. al. Seventh Revised and Enlarged Edition. Contains 922 pages, illustrated with 615 half-tone and other text engravings, many of them original, 37 full page plates, some in colors. The adoption of this book as a standard text book by the majority of the medical schools and laboratories of the country, and as a

reference book by medical institutions and libraries of foreign countries, has encouraged the author to make extensive revisions of the subject matter and eliminate methods and procedures which have become obsolete. Publishers: F. A. Davis Company, 1914-16 Cherry Street, Philadelphia, Pennsylvania. Price \$9.00.

Practical Surgery of the Abdomen, by George H. Juilly, M.D., Chief Surgeon to the French Hospital, San Francisco, California, with a foreword by W. Wayne Babcock, M.D. The authors have endeavored to place before the readers, by means of sketches and concise notes, the essential structures upon which the surgeon will have to work in order to perform a certain operation. This is to refresh his memory regarding little anatomical details or points of surgical importance which he may have forgotten, but which are essential to perfect technic. Volume I and Volume II contain 1275 pages with 1291 illustrations, some in colors. Publishers: F. A. Davis Company, 1914-16 Cherry Street, Philadelphia, Pennsylvania. Price, \$16.00.

COMMUNICATIONS

INSURANCE REPORTS

To the Editor:

Referring to your editorial in the August number of the Journal inviting communications from members of the Association on the subject of life insurance reports. I enclose herewith several articles written primarily in opposition to the vital statistics law but equally applicable to this particular form of betrayal of our patients' confidence, i.e. the issuance of unauthorized reports to insurance companies.

It is my belief that a physician has no moral or legal right to divulge information concerning a patient obtained through his professional relationship without specific warrant from the patient. Remuneration for making such reports should not be the determining factor, but rather authorization of the applicant (patient), then payment should be exacted in every instance for the service.

In this connection, permit me to state that the profession should be advised that the vital statistics law was inflicted upon them by propaganda sponsored and paid for by the insurance companies. What is its purpose? The compilation of reports for the insurance companies. Shortly we shall see periodical health reports and certified copies of reports from the bureaus of vital statistics supplant the routine life insurance examination in vogue today. Then, perhaps, we shall awaken to the realization that we are not rendering gratuitous service to HUMANITY but to the INSURANCE COMPANIES. Aye, the physician is a poor business man, easily duped, easily betrayed, when the appeal is made in the name of suffering humanity. The economics of the matter? Why, the physician secures the data, compiles and files the report without remuneration, the taxpayer pays for its preservation, the insurance companies profit by it. How simple and yet what a Godsend to suffering HUMANITY!

And still I am not hostile to the cause of insurance nor to the insurance companies, but refuse to recognize them as fit subjects for yet more charitable professional service so often involving disclosures inimical to the interests of my patients.

If this be treason, then make the best of it.

Very truly yours,

J. H. BAXTER, M.D.

Ashburn, Georgia

September 26, 1928.

BONDS FOR HOSPITAL

To the Editor:

At the last meeting of the Ware County Medical Society, a motion was passed to request you through the next issue of the Journal to ask the aid of the Profession throughout the state in securing at the next election in November, the passage of the amendment to the State Constitution authorizing Ware County to issue bonds to build a hospital.

Anything you can do to aid us in getting the voters to act favorably upon this enabling act will indeed be appreciated.

Fraternally yours,

K. McCULLOUGH, M.D., *Secretary*.

Waycross, Georgia

September 14, 1928.

NEWS ITEMS

Dr. Samuel R. Methvin, Lindale, has been appointed physician for the Lindale Mills. He succeeds Dr. J. N. Cheney, who has been physician for the mills for more than ten years and resigned recently.

Ware County will appeal to the citizens of Georgia to vote for a constitutional amendment in the general election to be held in November to authorize Ware County to issue bonds to build a modern hospital.

Drs. Richard Binion, John W. Mobley and W. M. Scott, Milledgeville, will be associated in the practice of medicine with offices in the Doctors' Building.

Thomas County Medical Society met at the John D. Archbold Memorial Hospital, Thomasville, August 28. A paper entitled Medical Ethics was read by Dr. W. W. Jarrell; Radium and Thyroid by Dr. A. D. Little; Malaria by Dr. R. F. Bell.

Dr. Joseph C. Massee announces the opening of his offices for the general practice of medicine at 157 Forrest Avenue, N. E., Atlanta, associated with Dr. E. C. Thrash.

Dr. J. R. Garner, Atlanta, President of the National Association of Railroad Chief Surgeons, will spend several days in Chicago, presiding at the annual session of the Association, which convenes on October 30.

The Seventh District Medical Society met at the Coosa Country Club near Rome, September 26. Program consisted of an address by Dr. C. K. Sharp, President of the Association; Work at Alto by Dr. Edson W. Glidden, Alto; Asthma in Children by Dr.

Hal M. Davison, Atlanta; Sterility in Women by Dr. W. F. Shallenberger, Atlanta; The Present Status of the Diagnosis and Treatment of Nephritis by Dr. Allen H. Bunce, Atlanta; Concerning the Treatment of Recent Injuries to the Eye and Adnexa by F. Phinizy Calhoun, Atlanta; Cervical Lymph Nodes by Dan C. Elkin, Atlanta; Physiological Facts and Clinical Observations Concerning the Pulse by James E. Paullin, Atlanta; Celiac Diseases, by W. L. Funkhouser, Atlanta.

Dr. R. L. Carter, Thomaston, has been in Chicago and Rochester, Minn., for several weeks taking a post-graduate course.

The Spalding County Medical Society met at the Griffin Hospital, Griffin, on September 18.

Dr. and Mrs. John T. McCall, Rome, entertained more than a hundred physicians and their wives on September 26 at a barbecue. The occasion was in honor of Dr. McCall's classmates and a few special friends.

Dr. T. G. Peacock, formerly of Birmingham, Ala., has moved to Thomaston and opened offices for the practice of medicine. He is a graduate of Harvard University School of Medicine.

Dr. W. D. Pritchett, formerly of Barnesville, has moved to Thomaston and will limit his practice to diseases of the eye, ear, nose and throat.

Dr. R. L. Carter, Thomaston, the efficient secretary-treasurer of Upson County Medical Society, will spend several weeks in Chicago and Rochester, Minn., taking post-graduate work.

Dr. R. A. Verdier, formerly of Thomaston, has moved to Ranger, Texas, and will continue the practice of medicine at the latter location.

Dr. C. K. Sharp, President of the Association, Dr. E. C. McCurdy, Shellman, Dr. J. C. Patterson and Dr. G. Y. Moore of Cuthbert, attended the meeting of the Sumter County Medical Society on September 13.

Dr. L. Minor Blackford announces the opening of offices for the practice of internal medicine at 202-3 Medical Arts Building, Atlanta.

The Executive Council of the American Medical Editors' Association adopted the following resolution: Be It Resolved, It is the sentiment of the American Medical Editors' Association that there should be a Medical Officer in the President's Cabinet. That such an office be created and that the interest of the medical profession should be aroused, and that editorials be written to appear in the medical journals of this

country, for the purpose of eventually accomplishing this result.

The Radiological Society of North America will hold its fourteenth annual session at Chicago, December 3rd to 7th, inclusive. The Drake Hotel at Lake Shore Drive and North Michigan Avenue, has been selected as headquarters. There will be no registration fee and no other additional expense. An effort is being made to secure reduced transportation rates. The Ladies Local Reception Committee is making plans for the entertainment of all visiting ladies.

Thomas County Medical Society met at the John D. Archbold Memorial Hospital, Thomasville, August 30. Papers entitled as follows were read. Medical Ethics, by Dr. W. W. Jarrell, Thomasville; Radium and Fibroid, by A. D. Little, Thomasville; Malaria, by Dr. R. F. Bell, Boston.

Dr. J. M. McElveen, Brooklet; Dr. C. E. Stapleton, Groveland, and Dr. E. C. Watkins, Brooklet, entertained the members of the Bulloch-Candler Counties Medical Society at the High School Auditorium in Brooklet, September 12.

OBITUARY

Dr. D. H. Monroe, Member, Emerson; University of Georgia Medical Department, Augusta, 1900; aged 53; died August 22, in an Atlanta sanitarium after a brief illness. He was Commissioner of Health for Bartow County and one of the most outstanding physicians of his community. Dr. Monroe took an active interest in education and served at various times as chairman of the Board of Education of Bartow County. Surviving him are his widow and one brother. Funeral services were conducted by Rev. W. S. Robison, pastor of the Sam Jones Memorial Methodist Church, assisted by Dr. I. A. White and Rev. Richard C. Wilson.

Dr. Daniel C. Montgomery, Thomasville; Southern Medical College, Atlanta, 1886; aged 70; died September 11 at his home. He had lived in Thomasville for more than twenty-five years, moving there from Wakulla County, Florida, where he had practiced medicine for years. Dr. Montgomery was very active in the practice of medicine until recent years. He was considerate and possessed likeable personality. He was a member of the Baptist church. Surviving him are one daughter, Miss Christine Montgomery; three sisters, Miss Cornelia Montgomery and Mrs. George Swift, of Thomasville, and Mrs. D. A. Dixon. Moultrie. Funeral services were conducted from the residence by Rev. T. F. Callaway, and interment in Laurel Hill Cemetery.

Pay 1929 dues to the Secretary-Treasurer of your County Society now.

THE PROGNOSIS OF TUMORS

(Continued from Page 440)

differentiated from a histological standpoint we can be almost sure that metastases will occur. I have seen this in many cases, and checking the question of ultimate prognosis we find that the undifferentiated lesion gives almost no hope. It was my good fortune to work with Broders nine years ago when he was developing his work on cancers of the skin. The question came up is accurate differentiation a technical detail which can be transferred from one individual to another. Is not the work beyond the scope of the average individual? I say it is not. Working with Borders and checking approximately 4,000 cases of cancer we made only four errors in differentiation in which we did not class the tumor in the same group respectively. You must go back and learn what is the essential cytology of the cell and how it differentiates, and that is not a difficult faculty to obtain. I think pathologists have to come to the question of cell cytology and cell growth if we are to get accurate diagnosis and prognosis in malignant cases.

Dr. Everett L. Bishop, Atlanta (closing): Just a word about the melanoma group, whether melano-carcinoma, melano-sarcoma, or what ever you wish to call them. Some cases are reported as cured by various methods, but there is no way of knowing that it is an active melanoma without histological examination. It may be an active nevus and not a true malignant tumor. Melanoma is a most malignant tumor, and they have the capacity of producing metastases years after the primary tumor has been excised. I recall two cases of this type, in which the history showed that a "mole" had been removed six or eight years previously.

As to the effect of radiation, we do not always hope to produce a fibrous mass as mentioned by Dr. Thrash. In some tumors the individual cells are destroyed by lysis and the fluid absorbed. These tumors fade away under radiation. In other tumors, fibrosis is marked and the vascularity greatly decreased, decreasing the rate of growth and metastasis.

WHAT IS NEEDED TO IMPROVE THE PRACTICE OF OBSTETRICS

(Continued from Page 453)

deliveries. These drugs give the patient rest and time to recoup her strength. I also believe that they allow the circular muscles of the cervix to dilate more rapidly.

Another thing I wish to mention is the observation of the fetal heart tones during la-

bor. This is often carelessly overlooked. When we remember that there are about 100,000 babies lost at birth each year in the United States and an additional 100,000 who die within the first few weeks of life we realize the importance and necessity of making this observation. Less pituitary extract would be given if we would listen before and after giving it. I have observed the fetal heart rate drop from 140 per minute to 65 after the administration of only two minims of pituitary extract.

Dr. E. Carson Demmond, Savannah: Dr. McCord sounds a note of conservatism that is very timely. We will have better obstetrics if we follow his teaching. In addition to this, and the things he mentions for home use, I wish to say that I have been using mercurochrome, and think it has been of value in preventing the morbidity. In the prevention of vaginal infection the doctor did not mention vaginal secretion. We all know that during the last weeks of pregnancy there is an added discharge and there may be some irritation, and the natural thing is to take a douche, but this may wash in more infection.

I think an examination made under absolutely aseptic conditions is more or less necessary for the practice of good obstetrics, but how often have we seen men carry this out during the early stages and then during labor make innumerable examinations, thereby increasing the possibility of infection very greatly.

Dr. McCord's remarks about pituitrin are very well worth while, and I think it is much better postpartum than intrapartum.

Of course we all appreciate the great value of prenatal care.

MEDICAL ECONOMICS

(Continued from Page 457)

you five or six years later, after you have forgotten all about the occurrence, unless he is mad at you. The overhead expense, I think, is the great things we have to figure on.

Dr. W. P. Harbin, Rome (closing): Several years ago we undertook to study group practice and wrote to several men who were conducting successful groups, asking them to tell us the details of their financial and professional success. Often the answers to this inquiry are personal and the true replies may indicate commercialism. We tried to get in touch at several meetings with good men who were successful in group practice and get them to give us talks, but their talks would usually deal in generalities. If you want to find

out how a group is succeeding, if you will go to the doctor himself, who made the group, he will probably give the intimate details, and you will get something out of it, but if you put him up before a society for a talk he hesitates to tell you about his personal professional and financial methods.

HOME MANAGEMENT OF DIABETES MELLITUS

(Continued from Page 462)

is not necessary to have hospitalization. You can teach him the necessary diets and I think in three-fourths of the cases they will become sugar-free. I have found in the mild cases of diabetes that the tolerance grows when you get them sugar-free and keep them that way. You have to teach them how to examine their urine and teach them something about diet. The great trouble I find with the medical profession is that they do not know much about food values. I saw a patient with another doctor last week. He had been treating this patient on toast and milk and was unable to get her sugar-free. He told me he thought the reason was that she had not been toasting the bread quite well enough. We can study up on the relative food values and can diet our cases scientifically. In the treatment of diabetes diet is the main thing and always will be and if we will learn food values we will find it very easy. Then if we get co-operation in the majority of cases we will not have to give insulin.

Dr. W. E. McCurry, Hartwell (closing): There are many interesting points that have been raised in the discussion, but most of them have been covered in the paper, part of which I did not have time to read. I will only read a few more extracts in closing.

COARCTATION OF THE AORTA

(Continued from Page 464)

cy, and rupture of the aorta or of a cerebral vessel accounts for the rest. In 10 per cent of a recent series death was from subacute bacterial endocarditis or aortitis. The advice to be given such a patient, therefore, is to avoid violent exertion, to have possible foci of infection removed, and to eat what he pleases.

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ASHEVILLE AND THE SOUTHERN MEDICAL MEETING

Asheville, N. C., is situated in the Southern Appalachian Mountains and is an admirable place for the annual meeting of the Southern Medical Association, November 12 to 15. It has ample hotel facilities, excellent golf courses, tennis courts, facilities for horseback riding, swimming, motoring, sail boating and archery, amid beautiful surroundings, make Asheville a Southern center for sports of all kinds.

The magnificent Biltmore estate, world famous country home of George W. Vanderbilt heirs, is open to visitors three days of each week. In and near Asheville are marvelous gardens and miles of landscaped drives among lakes and mountains. The Pisgah National Forest, a three hundred thousand acre playground of forested mountains and hurrying trout streams.

Eleven modern hotels and inns offer excellent accommodations to convention attendants. The Battery Park, George Vanderbilt, Langren, Asheville Biltmore, Jenkins and Swannanoa Berkley offer the European plan of service; while Kenilworth Inn, Grove Park Inn, Margo Terrace, the Manor, the Princess Anne are operated on the American plan.

A HAPPY COMBINATION

The aim in scientific medication has always been to combine the highest degree of efficiency with the lowest degree of risk — for it is almost a truism in medicine that any drug powerful enough to do good may also, if indiscreetly used, do harm. Thanks to the research work that is so intensively carried on by our best pharmaceutical manufacturers, the element of danger is being reduced without impairing the element of efficiency; and this applies to both chemical and biological products—iodine, mercury, the salicylate, anti-toxins, antigens, etc.

One of the most striking examples of this class of work is the separation of the virulence of rabic brain tissue from its antigenic activity. By the method of Dr. Cumming (dialysis) a Rabies Vaccine is offered by Parke, Davis & Co. which cannot possibly infect the patient with rabies, but which is claimed to be much more efficient as a prophylactic, after the bite of a mad dog, than the original Pasteur vaccine.

COMMENDABLE RESEARCH

The growing activities of commercial firms in chemo-therapeutic research, in collaboration with universities and clinics, has led to much favorable comment on the part of the medical profession. Never has there been a time in the history of medicine when such important research developments have taken place, and are now under way.

As an example of what can be accomplished, the ABBOTT LABORATORIES, North Chicago, Ill., has, during the past ten years, taken a place in the front rank of pharmaceutical manufacturers through its successful research work. It is understood that this firm, together with its subsidiary, the Dermatological Research Laboratories of Philadelphia, expended over \$100,000 in research work in the year 1927. New and important discoveries for the use of the medical profession have resulted from these scientific investigations and other work is in progress.

A new scholarship for chemo-therapeutic research at Northwestern Medical School of Chicago has just been announced by Dr. Alfred S. Burdick, President of the Abbott Laboratories.

RELIEF NEEDS STRESS RED CROSS MEMBERSHIP APPEAL

Services in the American Red Cross in the United States and in foreign countries during the fiscal year ended June 30, 1928, called for expenditures totaling \$25,240,000.

This is an impressive figure, made more so when it is realized that of this total, \$18,046,000 went toward disaster relief. More than 100 major disasters received aid from the American Red Cross during the year and the total number of sufferers cared for, including the people aided as an aftermath of the Mississippi floods, amounted to 685,000 persons.

Second only to disaster relief was service to disabled veterans and their families and men in the active service of the army, navy and marine corps. In terms of money, this service amounted to \$3,391,000, but the resultant happiness and cheer brought to the men thus aided their families cannot be measured.

Much of the work of the peace-time program of the American Red Cross is devoted to the promotion of national health and safety. This phase of activity of the organization includes public health nursing service, instruction in home hygiene and care of the sick, instruction in nutrition, first aid instruction as well as life saving classes. Demonstrations in first aid to injured and regular classes in life saving are held under the auspices of the Red Cross wherever the need warrants their holding.

The Red Cross, in addition, maintains a competent staff of experienced workers trained for any emergency, such as disaster service, as well as an enrolled reserve of Red Cross nurses. This reserve is called upon in emergencies, such as the floods of recent years, storms and epidemics.

Instruction along health lines and in nutrition undoubtedly contributes much to the efforts of local health authorities to maintain proper conditions in

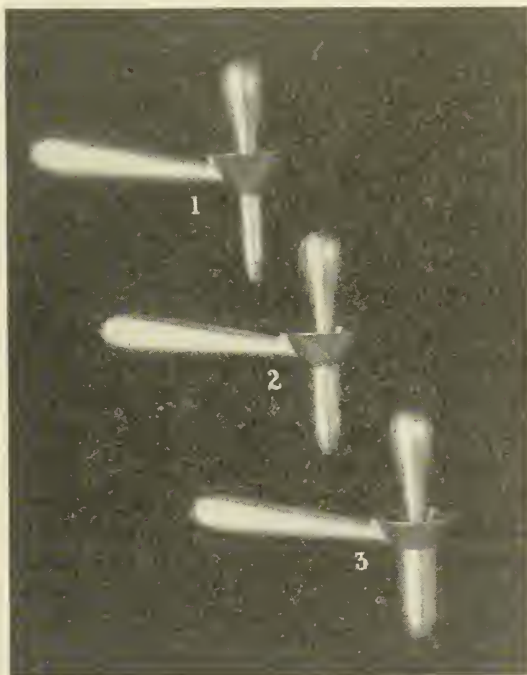
their communities. The first aid and life saving instruction of Red Cross experts has grown in favor and demonstrations and classes are in greater demand than ever before.

Excepting in disasters of a national magnitude, the Red Cross asks popular support only through enrollment in its ranks during the annual Roll Call for members. The Twelfth Annual Roll Call of the American Red Cross will be held this year from Armistice Day, November 11, until Thanksgiving day, November 29, at which time it is planned to enroll 5,000,000 members.

PAPILLARY CYST CARCINOMA OF OVARY

John B. Deaver, Philadelphia (*Journal A. M. A.*, Oct. 6, 1928), concludes that papilliferous cyst carcinoma of the ovary in all probability originates from the germinal epithelium. It is malignant. In the great majority of cases it develops from the papilliferous cyst adenoma, although it may be carcinomatous from the start. The tendency is for these cysts to be bilateral. They contain a bloody fluid, as a rule, associated with ascites. The symptoms are similar to those of any other cystic tumor except that in carcinoma there may be an associated loss of weight. They metastasize readily by implantation. In papilliferous cyst carcinoma of the ovary the knife judiciously used is not only a great help but is unquestionably the treatment of choice.

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THE JOURNAL OF THE MEDICAL ASSOCIATION OF GEORGIA

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Atlanta, Ga., November, 1928

No. 11

SUCCESSFUL VACCINE PROPHYLAXIS AND TREATMENT OF WHOOPING COUGH*

LEE BIVINGS, M.D.,
Atlanta

The use of Pertussis Vaccine in the prophylaxis and treatment of whooping cough is almost universal but the faith in its efficiency is extremely variable. Apparently most men give it because they know of nothing better and with little hope that it will be of much value.

The literature would lead one to believe that it is of definite value and in a series of 47 cases I have found that to be true in a larger percentage of cases than I have seen reported, in fact as a prophylactic I believe it nearly perfect and as a therapeutic agent definitely beneficial, ranging from a complete abortion of the attack to a diminution of the severity and shortening of the period of severe symptoms. In the series of treatment cases there were only two who vomited any after the administration of the second dose of vaccine, this alone I consider sufficient recommendation for the use of vaccine.

The success depends, in my opinion, to one factor and that is the size of the dose, providing the vaccine is potent. The dose in the first few cases was small but soon increased to the figures given in the table below and held there without the occurrence of unfavorable signs or symptoms in a single case.

It has been necessary only on three occasions to give more than four doses and then only six were used. I believe that is considerably under the total usually given. The doses are given every other day beginning as soon as possible after coughing and definite exposure or other symptoms warrant a diag-

nosis of whooping cough. In doubtful cases I believe one is wise in giving the mixed vaccine since no harm can come of it and an immunity of several months duration is given.

The dosage table is as follows:

Ages 2-6 years:

| | |
|------------------|--------|
| First dose | .5cc. |
| Second | 1. cc. |
| Third | 1.5cc. |
| Fourth | 2. cc. |
| Fifth | 2.5cc. |
| Sixth | 3. cc. |

When it is deemed necessary to give the fifth and sixth doses they are divided into equal parts and given into both arms or all at once in the loose tissue between the scapulae.

A table showing in detail the results is given below. It is gratifying to me that the results have been so uniformly successful. In some instances the improvement has been so marked and so abrupt as to be almost dramatic. Case No. 39 had been coughing for three weeks, the night cough had become so bad that the parents had had little rest for a week, the whoop was well marked and the vomiting severe. After the second dose of vaccine his vomiting ceased and the paroxysms decreased to two or three a day, and his nights were comfortably spent without disturbing the parents. It was necessary to give only three doses to bring the disease to an abrupt end.

When treatment is begun early it is often difficult to tell whether or not the child has whooping cough for frequently they do not whoop and in this series vomiting has occurred in only two cases. The definite exposure to some member of the family or close neighbor has established the diagnosis in all doubtful cases.

In the most severe cases mentioned as being the only two in which vomiting occurred an accurate record was kept of their weight

*Submitted for publication, October 5, 1927.

TREATMENT TABLE

| Age Yrs | Date | Doses | Course | Vomiting | Loss of Wt. | Exposure | |
|------------|----------------|-------|--------|---|-----------------------|----------|--------------------|
| 2. | 2 | 1925 | 4 | Moderately severe, small doses used. | Yes | No | Neighbor |
| 3. | $\frac{1}{2}$ | 1925 | 4 | Mild | No | No | Neighbor |
| 12. | $1\frac{1}{2}$ | 1925 | 4 | Moderate with some whooping | No | No | Neighbor |
| 13. | 2 | 1926 | 4 | Moderate with some whooping | No | No | Neighbor |
| 14. | 8 | 1926 | 4 | Mild, no whooping | No | No | Sister |
| 15. | $\frac{3}{4}$ | 1926 | 4 | Mild | No | No | Sister |
| 16. | 2 | 1926 | 4 | Mod. severe whooping | No | No | Neighbor |
| 17. | 7 | 1926 | 4 | Mild | No | No | Sister |
| 18. | 2 | 1926 | 5 | Moderate with some whooping | No | No | Neighbor |
| 24. | 3 | 1927 | 4 | Mild | No | No | Neighbor |
| 25. | $1\frac{1}{2}$ | 1927 | 4 | Mild | No | No | Neighbor |
| 26. | 4 | 1927 | 4 | Mild | No | No | Neighbor |
| 27. | 3 | 1927 | 3 | Mild | No | No | Neighbor |
| 28. | 2 | 1927 | 4 | Mild, occasional whooping | No | No | Neighbor |
| 29. | 3 | 1927 | 4 | Moderate, some whooping | No | No | Cousin |
| 31. | 6 | 1927 | 6 | Moderately severe, considerable whooping | No | No | Cousin |
| 33. | 5 | 1927 | 4 | Moderate, some whooping | No | No | Neighbor |
| 34. | 8 | 1927 | 2 | Severe, would not continue treatment. | No | No | Brother |
| 35. | 6 | 1927 | 4 | Moderate, some whooping | No | No | Neighbor |
| 36. | 5 | 1927 | 4 | Moderate, some whooping | No | No | Neigh., same house |
| 37. | 3 | 1927 | 5 | Moderately severe, last dose terminated attack abruptly | No | No | Neigh., same house |
| 38. | 2 | 1927 | 4 | Mild | No | No | Neigh., same house |
| 39. | 4 | 1927 | 3 | Severe before treatment, abruptly ceased after 3d dose. | Not after treatment | No | Neighbor |
| 40. | 5 | 1927 | 4 | Moderate | Once a day at 5 A. M. | No | Cousin |
| 41. | 3 | 1927 | 4 | Mild | No | No | Cousin |
| 42. | 4 | 1927 | 4 | Mild | No | No | Neighbor |
| 44. | 4 | 1927 | 4 | Moderate with some whooping | No | No | Neighbor |
| 45. | 5 | 1927 | 6 | Severe, but abruptly broken after 6th dose | Yes | No | Neighbor |
| 46. | $1\frac{1}{2}$ | 1927 | 4 | Moderate, broken after 3d dose | No | No | Cousin |

PROPHYLAXIS

Eighteen children were given prophylactic treatment of 4 doses; none developed the disease within a year.

and they did not lose but remained stationary. The vomiting lasted less than ten days and ceased entirely after the sixth dose of vaccine.

If the most severe cases were so obviously benefited it is hardly necessary to say that in every case the disease was materially shortened and lightened.

The only other treatment given was a Calcium mixture which could not have affected the severity of the cough to any appreciable extent.

The reaction has never been very severe except locally, which I consider a good criterion of the correct dosage. Only in rare instances did any systemic symptoms occur. Two children had a diffuse erythematous rash during the administration of the vaccine which caused only the slight discomfort of itching and it is doubtful whether the vaccine could have caused it. There was no chance of confusing the rash with any infectious disease.

Other methods of treating whooping cough have proven either impractical from an economic standpoint or of little value in a large series. It is with the hope of renewing confidence in the efficiency of the vaccine treatment that this series is presented.

PROPHYLAXIS

In this series of 18 cases given prophylactic treatment after definite or expected exposure not one has developed a disease within six months after vaccine was given.

To cite an interesting proof of its value, cases Nos. 4, 5 and 6 were members of the same family, case No. 6, age, 2 years, developed the disease, his little sister, age 9 months, and brother, age 7 years, were given prophylactic treatment at the same time he was given the therapeutic doses; he ran a mild attack without vomiting and the other two children never have developed the disease although no particular effort was made to prevent contact.

(Continued on Page 520)

PRIMARY ANEMIA*

Treatment With Liver Fraction

GLENVILLE GIDDINGS, M.D.,
Atlanta

The purpose of this paper is to report the effect of the administration of liver extract to patients with pernicious anemia. This work has been carried on at the Steiner Clinic in Atlanta during the past eight months with liver fraction furnished Dr. Stewart Roberts and myself, through the courtesy of the Harvard Pernicious Anemia Commission. The material is prepared by Eli Lilly & Company.

It has been quite generally accepted that Minot and Murphy have demonstrated that a diet containing a large amount of liver can markedly increase the number of red blood cells and the percentage of hemoglobin in cases of pernicious anemia. The nature of the liver constituent that produces this increase in cell growth has been studied by Cohn, Minot, Fulton and others, and it is believed that the liver fraction that has been produced by them permits or stimulates the development or growth of the immature primitive cells in the bone marrow, and thereby increases the red corpuscles in the blood stream and the percentage of hemoglobin.

The material we speak of as "liver fraction" or "liver extract" is a brownish powder with a rather sweet taste and a pungent odor. It is marketed in small glass vials which contain the equivalent of 100 grams or $3\frac{1}{2}$ ounces of liver substance. Briefly, it is prepared from minced liver by varying the Ph concentration, coagulating with heat, extracting with water, ether and alcohol. Thus the liver is divided into its water soluble and insoluble components, into its proteins and non-proteins, its lipoids and non-lipoids, its dialysable and non-dialysable constituents. The procedure involves seven steps and it is only the final fraction, "fraction G" that is effective in the treatment of pernicious anemia. It is given by mouth stirred either in water or in orange juice. Following the

work of other investigators—namely, Damescheck and Krumbaar, we believe that the improvement or non-improvement of cases of pernicious anemia can be more accurately followed by the reticulocyte response than by any other method. The appearance of reticulated red cells in the blood is the surest and earliest sign of reacting bone marrow. (Nägel.) Reticulated red cells are young growing red cells probably in that stage of growth that immediately precedes their development as erythrocytes or the adult red blood cell. These cells are not seen in fixed preparation stained by the ordinary methods, but require a special staining with brilliant cresyl blue to demonstrate their presence. When so stained, certain red blood cells, will show up containing bluish black lacelike filaments or granulations. These cells occur in the normal blood in less than one per cent. In pernicious anemia the count may run as high as two to five per cent.

When a patient with pernicious anemia receives liver fraction there is a marked and prompt rise in this reticulocyte count ranging anywhere from 15 to 49 per cent at its height. This response in reticulocyte rise begins anywhere from two to seven days after the extract is begun, and remains elevated over a period of from 14 to 22 days before resuming its normal level. In a majority of the cases studied this rise began about the fifth day and reached its maximum within from 14 to 18 days after the treatment was begun. The response on the part of the red blood cells and hemoglobin seems to follow the increase in the reticulocyte count somewhat closely. In all of our cases there was a rise of as much as a million cells in from seven to fifteen days after treatment was instituted. During the first few weeks of treatment the red cells and hemoglobin seem to increase simultaneously. After that an increase in the one may be noted which is followed in from two to five days by an increase in the other. A striking feature in patients receiving the extract is their physical response. It has been observed that patients who, on account of nausea and vomiting, have been unable to retain food for weeks and have after treatment was be-

*Read before the Medical Association of Georgia, Savannah, Ga., May 10, 1928.

gun been able to eat and relish a full diet in from three to five days. Nausea, as a rule, was relieved in from 24 to 48 hours. This was shown very strikingly by a patient who came in two months ago with a hemoglobin of 10 per cent and a red cell count of 500,000 per c.m.m. This man, on account of extreme nausea, received nothing by mouth for 24 hours except the fraction in orange juice every eight hours. At the end of this time his nausea had subsided and he was placed on a full diet which he retained perfectly. A similar response was shown by another case which was admitted with a red count of 900,000 and a hemoglobin of 12 per cent. This case had been unable to retain nourishment for over two weeks. In less than 48 hours after beginning the extract the nausea had cleared and the patient was eating with comfort. No case developed a diarrhea while under observation and it was seldom necessary to give a laxative. No cases were seen with central nervous system lesions. Hence we cannot say first hand what would be the effect of this treatment. It is understood, however, to have no effect other than to check the progress of the nervous involvement.

The average red cell count of patients before beginning treatment was 1,100,000. The average hemoglobin was 21 per cent. I believe you will agree that these figures are considerably lower than the average case seen in private work. The hemoglobin was estimated by Dare's method and all blood counts were done by the same technician in order that the personal error, if present, might remain constant. After one week on the liver fraction the average red cell count had risen to one million seven hundred thousand cells and the average hemoglobin had increased to 31 per cent. At the end of two weeks the average red count had risen to two million three hundred thousand and the average hemoglobin to 44 per cent. In other words, at the end of two weeks administration of the extract the red cells and hemoglobin had been slightly more than doubled. After one month's administration the average red cell count was three million five hundred thou-

sand and the average hemoglobin was 66 per cent. The red cells and hemoglobin had slightly more than trebled. At the present time after having been on the fraction for eight months all cases, except those that have come in within the past thirty days, have a cell count of four million or over and a hemoglobin of from 65 per cent to 80 per cent.

The increase in weight of these patients was not great. This is not remarkable, however, in view of the fact that the total caloric value of the diet was not over 3,000 calories a day and frequently less, due to large amount of 5 per cent vegetables that the patient received and the restriction in the amount of fat. All patients received large amounts of dilute HCL after each meal, up to one dram of the acid being given at each dose. It is believed, however, that the administration of this acid had very little, if anything, to do with the improvement of the blood. As all cases showed an achylia gastrica, it seemed sound therapy to give hydrochloric acid. A number of the cases have omitted the acid since leaving the Clinic without ill effects either symptomatically or in so far as the blood maintenance was concerned.

It is believed that the dosage of the extract should be gauged by the response on the part of the reticulated red blood cells. We have begun all cases on six vials daily of the extract, this being the equivalent of 600 grams of whole liver. These were given in three doses of two vials each. The material has been given in orange juice as it seemed more acceptable to the patient given in that medium. When given in dosage greater than six vials a day, there was no greater increase noted in the reticulocyte count. In Case 1, the reticulocyte count had reached its peak at 21 per cent and was beginning to fall. The extract was increased from six vials to eight vials a day. The reticulocytes continued to fall, the added fraction giving no additional stimulation. On several occasions, however, in cases in which the blood findings were still low—for example, below three million reds and less than 40 per cent hemoglobin, a reduction in the amount of extract from six vials to three vials was followed by a rather

prompt fall in the red cells and hemoglobin. It was only after the extract was resumed in full six vials doses that the blood improvement was resumed.

In most cases where blood findings have approached normal we have been able to reduce the fraction to two vials a day and find that the patient still maintained his normal figures. At the present time four cases have been on two vials a day for over two months with practically no change in the blood picture. Whether the fraction can be reduced to a lower figure than this we are not prepared at this time to state. Such a dosage gives the equivalent of 200 grams of whole liver, the amount specified in Minot's original diet. It is also believed that there are some cases which will not stand the reduction of the fraction to this amount. These may require three vials or even four vials for their blood maintenance.

From this it may be concluded that the maximum effective dose of the liver extract is six vials a day; that when the patient's blood picture approaches normal this amount can be reduced even as low as two vials a day which may be given as a single dose.

Since beginning the use of the liver extract we have failed to recognize any indication of transfusion in this disease. Even in cases admitted with considerably less than a million red cells and the hemoglobin correspondingly reduced, their response to the fraction has been so satisfactory that we believe the danger from transfusion reactions more than counterbalances any good effect they may receive from that procedure.

From a clinical standpoint attention is drawn to the importance of establishing a definite diagnosis of pernicious anemia. During the month of June, last, there were admitted to the Steiner Clinic five cases with a diagnosis of pernicious anemia. Four of these cases were suffering from malignancies and there was only one case of true pernicious anemia. We have been so impressed with the prompt response by the patient to the administration of liver extract that we have come to regard this as almost a therapeutic test. If a patient after taking adequate dosage of the fraction for from two to three

weeks fails to show the characteristic response, the diagnosis is probably incorrect. It might be mentioned that the color index has been of very little assistance as a diagnostic factor where the blood findings are low. Nucleated red blood cells have occurred in varying numbers. Some cases have a tendency to show nucleated cells in considerable numbers, while in others they are found only rarely. As the patient improves there does not seem to be any rule as to these cells increasing or decreasing in the blood. For this reason they are of little significance as an index of improvement. With the patient's general improvement there was also a marked fall in the icterus index, as has been noted after the feeding of liver substance. (Minot.)

In addition to the liver fraction we followed the remainder of Minot's diet quite closely; that is, the patient received daily 120 grams or $3\frac{1}{2}$ ounces of muscle meat in the form of beef or lamb, from 300-500 grams of 5 and 10 per cent vegetables, and all the fruit he could take. The fruits consisted largely of oranges, grape fruit and apples. Two or three slices of toast were taken daily with small amounts of butter and two glasses of milk. Cereals were also allowed. This furnishes a diet high in iron and relatively low in fat. It has been noted, however, in patients after leaving the clinic, especially those living in rural sections, that they were unable to maintain this diet with any degree of completeness. Oranges and grape fruit were difficult to obtain, as were green vegetables during the winter months. There was a tendency, therefore, for the patient to lapse to the diet taken before reporting for treatment. It is a striking fact, however, that as long as these cases took the liver fraction, even though the remainder of the diet was poorly maintained, there was no fall in the blood count. It would seem to be a fact, therefore, that the dietary regime plays a very little part in the patient's improvement. The essential factor is the liver extract which seems to act as specifically in pernicious anemia as quinine does in malaria. Just what this extract furnishes which produces the marked stimulation of the bone marrow is as yet a matter of surmise. Cer-

tainly the theory advanced to explain the action of liver substance as being due to the amount of nucleo-protein eaten is no longer tenable, as the extract is protein free. Also it is not any known vitamine. (Minot.) It would appear to be a specific substance bearing a relation to this disease not unlike the relation insulin bears to diabetes. Whether this substance is deficient in cases of pernicious anemia as a result of prolonged lack of hydrochloric acid in the gastric secretion is a matter of speculation.

The work that we have done on cases of secondary anemia has been too limited to draw any definite conclusions. For a number of months the amount of fraction produced was so small that it was used entirely in the treatment of cases of pernicious anemia. Recently we have given it to a few cases of secondary anemia with varying results. One case showed a rapid reticulocyte rise with a subsequent rise in the red cells and hemoglobin. It must be remembered that observations on secondary anemias must be carefully controlled before trustworthy conclusions can be drawn. For test purposes secondary anemia resulting from malignancies and infectious diseases are not suitable. Rather we have tried to select gynecological cases in which benign bleeding has been corrected. We are attempting to give alternate cases iron and to compare the results with those receiving liver extract.

The advantages of administering liver extract rather than liver substance to cases of primary anemia are obvious. First, we believe that the patient receives more prompt marrow stimulation from the extract than is gotten from eating the whole liver. An individual would have to consume approximately two pounds, raw weight, of liver to obtain the amount of fraction contained in 6 tubes. Second, by taking the fraction the necessity of eating constantly each day a specified amount of liver is obviated. Necessarily taking this same article of diet each day in considerable amounts becomes quite irksome to the patient. Third, in pernicious cases living in rural districts it is quite impossible at times to obtain liver. To be able to pur-

chase a sufficient supply of the fraction to last a month at a time solves their problem.

CONCLUSIONS

As a result of the above observations we have the following conclusions:

First: The administration of liver extract to cases of primary anemia was followed by a prompt and sustained rise in reticulated red cells.

Second: After a stated interval this was followed by a prompt and sustained rise in the red blood cells and hemoglobin. This result was obtained in all cases treated with this fraction.

Third: That the maximum effective dose of this material seems to be six vials a day and the minimum effective dose in individuals with high counts seems to be two vials each day.

Fourth: That the individual's relief from nausea and vomiting after the administration of the fraction was striking.

Fifth: That transfusion as a rule seems to be an unnecessary procedure in the treatment of this disease.

Sixth: That with adequate dosage of the extract, possibly in conjunction with a proper diet, there seems to be no obvious reason why a patient should ever suffer a relapse in this disease. Experience alone can prove this surmise.

Seventh: That further work will have to be done with this material in cases of secondary anemia before trustworthy conclusions can be drawn.

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DISCUSSION ON THE PAPER OF DR. GIDDINGS

Dr. W. R. Dancy, Savannah: I also wish to express my appreciation to Dr. Giddings for his excellent paper. It brings a very timely subject to our minds. I arose particularly to sound a note of warning. There is no more reason why liver extract should be thrown into the hands of the ignorant patient than should insulin. You will not obtain results with the liver extract or with

whole liver unless it is given with great regularity, care and intelligence. The patient who is to take six tubes of extract must take the six tubes, and must take them every day. This must be carried on until there is a marked rise in the redblood cells and in the hemoglobin, at least 4,000,000 red blood cells and 70 per cent hemoglobin. After that the liver or liver fraction must be reduced. When you reach the maximum effect you must establish the standard or sustaining dose of liver extract for the individual patient. The improvement will not remain constant if you do not continue the liver, although the relapse of the anaemia will not be of quite to the same degree of severity as previously existed. The liver extract that is being recommended is only 4 per cent of the whole liver, which makes it much easier for the patient to take than the whole liver.

In reference to the blood picture, it is interesting that in addition to the red cells and the hemoglobin the white cells also increase. In one of my patients, taking liver extract, the red cells rose from 1,200,000 to 2,000,000, a gain of 800,000 reds. The white cells rose from 3,200 to 5,000 cells, and the hemoglobin from 25 per cent to 35 per cent in the first week of treatment.

As to the diet, it is quite essential that in addition to the liver extract these patients shall have a well-balanced diet. A note of caution has been given that we shall not be too generous with starches and milk as they seem to have a slightly disturbing effect on the liver.

Another fact that has been brought out is that iron is objectionable and arsenic helps very greatly in these cases.

As to the amount of liver a patient can take, it would seem that there is no limit to the amount of liver or liver extract. No harm has ever resulted from giving an excess of liver, but if it is possible to work out the minimum dose that will carry the patient on, that is the dose that is desirable. It is also interesting that the longer the disease has existed the slower the response, and the older the individual the slower the response to this therapy. As to complications, the cases complicated with arteriosclerosis or any infectious disease are slower to respond to liver extract than the fresh cases without complications.

Dr. Everett L. Bishop, Atlanta: Having had an opportunity to check these cases with Dr. Giddings, it has been very interesting to note the gradual return to an approximate normal of the blood in all of them. The

(Continued on Page 527)

INTUSSUSCEPTION*

W. A. SELMAN, M. D.

Atlanta

In presenting the subject of Intussusception, I shall confine my remarks to the acute type—and more especially as it occurs in young children. This intra-abdominal calamity, while not so common as some gastro-enteric affections, of early life, does occur with sufficient frequency for us to bear its classical symptoms in mind, and when we recognize them, lose no time in making known the seriousness of the situation and the fact that "time is the essence of the contract."

I wish first to discuss the subject briefly and then report a case which came under my observation. Statistics show that it occurs about three times as often in males as in females and that healthy, robust, breast-fed children are quite, if not more often affected than the bottle fed babies.

The causes may sometimes be apparent as from adhesions, a Meckle's diverticulum, a polyp, cyst or fibrous tumor, but more frequently is theoretical, as excessive mobility of the cecum, difference in size of various parts of the intestinal tract—especially at the ileo-cecal valve—tenesmus from irritation within the intestine, etc.

From whatever cause, one part of the intestinal tract is invaginated or telescoped into another, and this so mechanically blocks the lumen, or compresses the blood and lymph vessels of the mesentery and intestine that intense pain is produced, edema rapidly ensues and a rapid succession of symptoms follow.

Four principal types are recognized; the ileac or enteric, involving only the small intestine, the colic, involving only the large intestine, the ileo-colic, and the ileo-caecal, involving both the large and small intestine and sometimes the appendix as well.

The symptoms are more classical than most intra-abdominal troubles.

First, the sudden onset of violent pain, occurring while at rest or in motion, while feed-

*Read before the Medical Association of Georgia, Savannah, Ga., May 10, 1928.

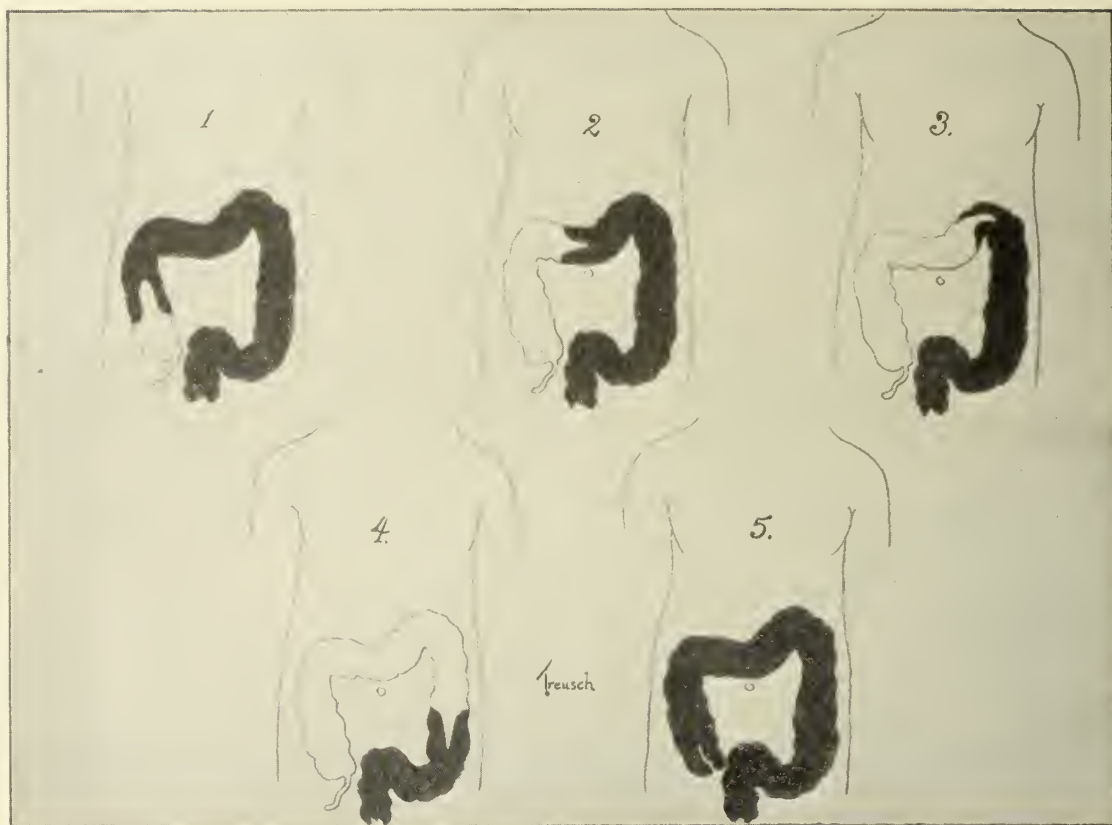


Figure I
Illustrating the value of the X-Ray in Intussusception.

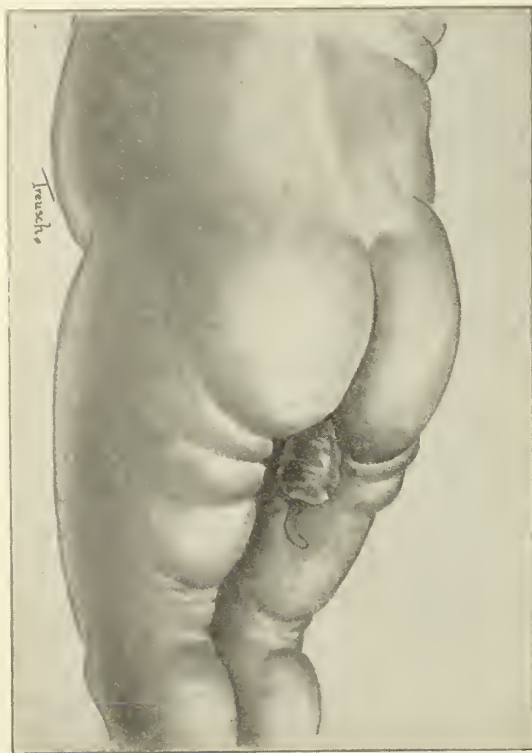


Figure 11
Appearance of tumor on admission to hospital.

ing or sleeping, constant at first and then becoming intermittent.

Second, vomiting is usually immediate or quickly follows. This persists more constantly and more pronounced in invagination of the small bowel.

Third, tenesmus, followed by one or two bowel movements or whatever contents are below the invagination. Later by mucus, bloody mucus or by a considerable amount of blood.

Fourth, a palpable mass can usually be detected—especially during intervals between straining—and before gaseous distension or peritonitis ensue.

Fifth, the pulse is weak and rapid.

Sixth, pallor and prostration are evident.

Seventh, the legs are drawn up.

Eighth, the temperature at first may be normal or subnormal, later going up.

Ninth, the right iliac fossa may show an emptiness and lack of gurgling in the cecum.

The diagnosis can usually be made from

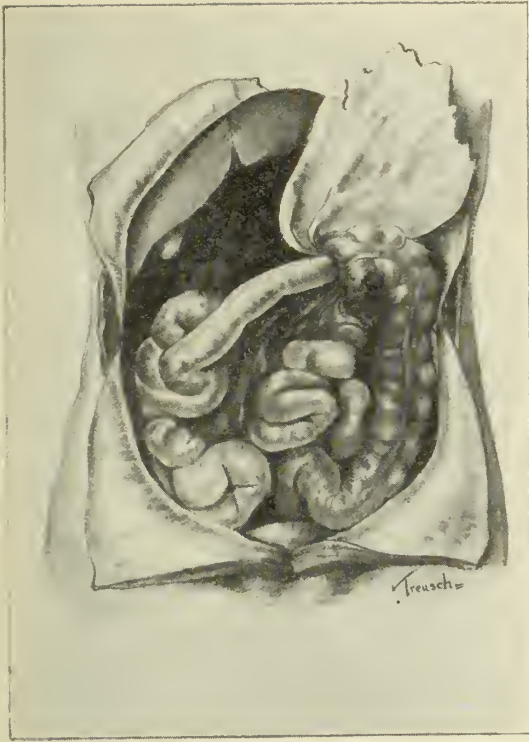


Figure III
Appearance within the abdomen.

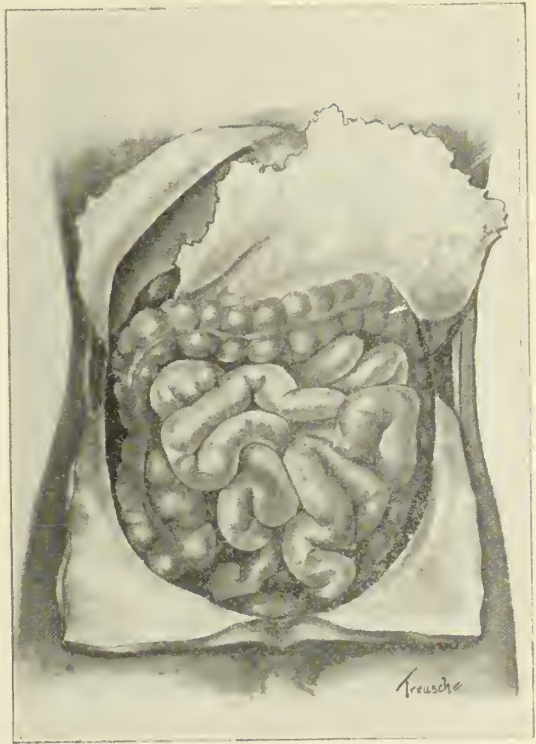


Figure IV
Intussusception reduced, except appendix.



Figure V
Longitudinal section of Intussusception.

the above symptoms, but a rectal examination should not be overlooked.

Another most valuable aid in diagnosis is fluoroscopic examination during a slow barium enema. A concave filling defect locates exactly the apex of the intussusception.

I have reproduced drawings from an article by Dr. Alfred A. Strauss of Chicago illustrating the valuable aid of the x-ray in this work.

This method is not only used by many as a diagnostic method, but by some as a method of treatment in early cases. When this can be done early, and great care used both in regard to the pressure of the fluid and pressure from the manipulating hand, I think it well worth trying.

In cases, except the ileac variety, the invagination may be seen to fill out and the barium be seen to trickle in to the ileum. If any doubt as to the complete reduction exists, the abdomen should be promptly opened surgically.

Successfully cured cases by this method are reported by Olsson and Pallin and by Dr. Hugh McKenna.

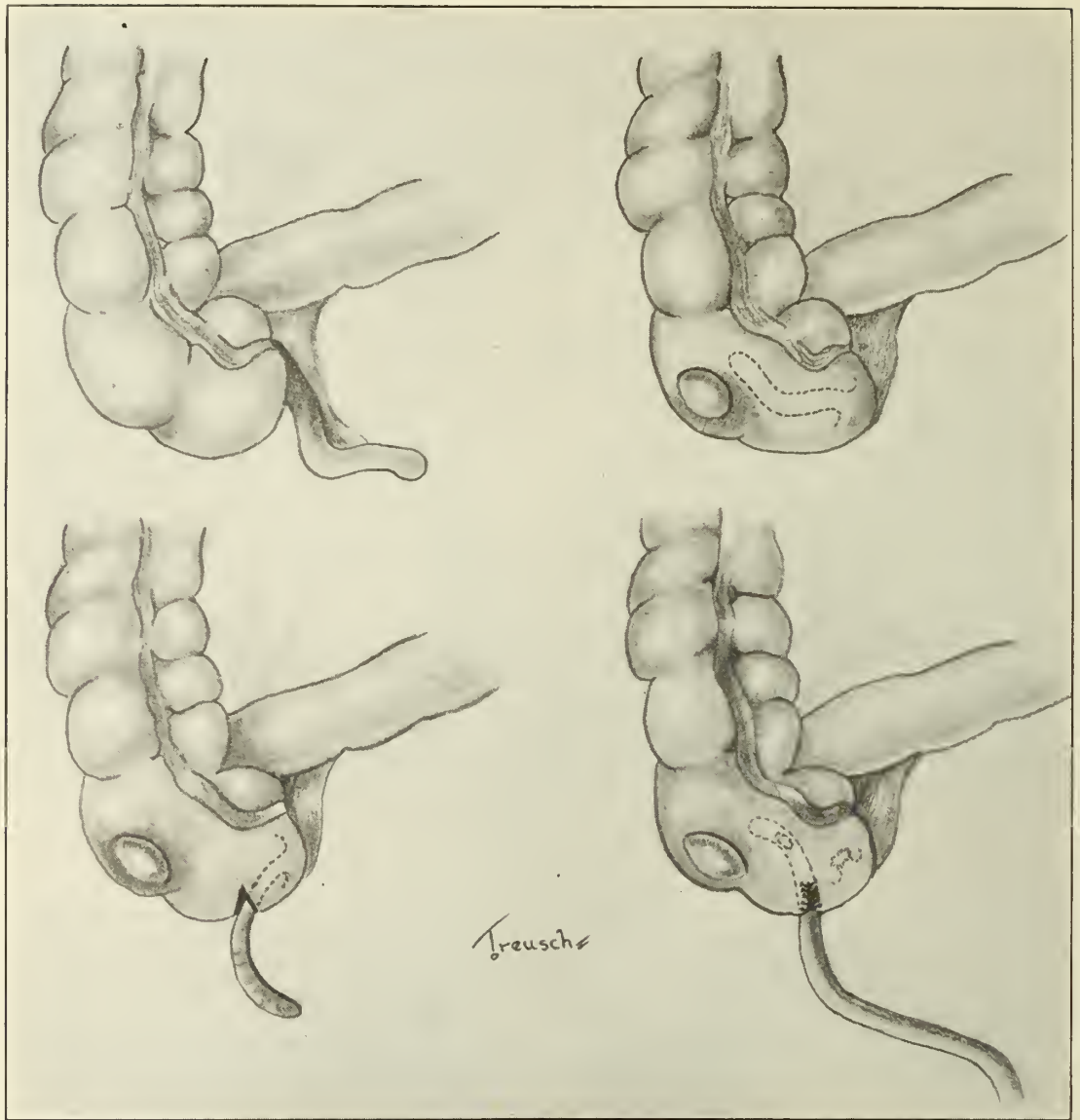


Figure VI
Showing various steps of operation on caecum.

The treatment, unless promptly accomplished by the opaque enema, under the fluoroscope, is surgical. The type of incision and the type of surgical procedure well depend upon the pathology found. If reduction can be accomplished and the bowel appears viable, it may be a simple matter, but when there is damage to the intestine or the mesentery, some type of repair or resection may have to be done. The report of my case follows:

Case Report

Case No. 29652—Georgia Baptist Hospital.

C. W., a white female, one year of age, was admitted to the Georgia Baptist Hospital, Atlanta, Ga., on January 23, 1928 with the following history given by the parents.

A previously healthy, well nourished, breast-fed child, was, on Friday, January 20, 1928, seized with abdominal pain and vomited immediately. She continued to vomit at intervals all that day and late that afternoon her bowels moved freely and repeatedly at one-half hour intervals until night. Castor oil and other home remedies were given but with no relief. Saturday the vomiting continued and mucus was expelled at stool. That afternoon an enema was given, which was returned with some blood. Sunday morning a mass, the size of an olive,

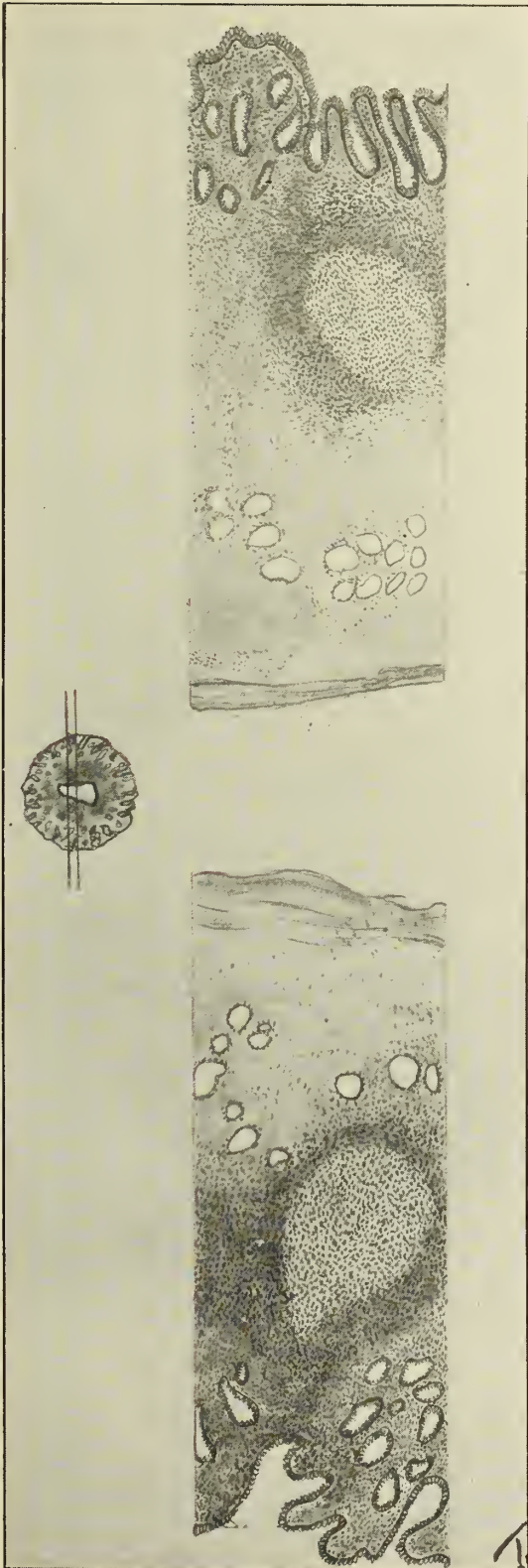


Figure VII

Microscopic section showing mucous coat externally and serous coat within.

protruded from the anus. This protrusion increased in size until it became larger than a lemon. A local physician was called and treated the child for piles, but could not reduce them. Monday morning, the 4th day of illness, they started to Atlanta, 200 miles away, where they had relatives, and where they hoped to find relief for this child.

Dr. Stephen C. Redd was called and sent the child to the Georgia Baptist Hospital and phoned me to meet him there in consultation. On examination at the hospital we found the child still vomiting, markedly dehydrated, dry skin, sunken eyes, tongue coated. Pharynx and oral mucosa inflamed, abdomen distended, skin pallid and in profound shock. There was a mass of intestine about three inches long by two inches thick protruding from the anus, and from the end of this mass projected a smaller mass measuring two and a half inches by one-half inch. This appeared to be the appendix turned wrong side out—and this it proved to be.

An immediate operation was decided upon, as it appeared to be an ileo-caecal Intussusception protruding from the rectum. While the operating room was being set up a two and a half per cent glucose solution in normal saline was started—50 cc in each pectoral region being given. Ether was administered by the open drop method and the field of operation was prepared by the mercurochrome acetone-alcohol method. Novocaine, $\frac{1}{2}\%$ solution was infiltrated into the line of the incision, which was just right of the mid line and extended from two inches above the umbilicus to the same distance below it.

An assistant cleansed the protruding mass with mercurochrome, followed by saline solution, and applied mineral oil before reducing it. With my hand in the pelvis, I could force the mass up the sigmoid and ascending colon, across and down to the right ileac region. The mineral oil aided me greatly in doing this as almost all the force had to be exerted from below by milking the mass upward. The invaginated ileum and the colon, together with a large part of the omentum, were found pulled down into the colon in the region of the splenic flexure. When the ileum and caecum were entirely reduced, the meso-appendix was found to be invaginated into the caecum and the enlarged and indurated appendix felt within it. A small opening was made in the caecum, the appendix delivered, tied at its base with No. 1 chromic cat gut and removed, leaving the stump invaginated. A soft rubber catheter

was sutured into the caecum to relieve the distension with the hope that it would prevent ileus of the injured bowel. At this time a cyst, three-fourth inch at base by one-fourth inch thick was found on the outer aspect of the head of the caecum. This was evacuated of a yellowish cloudy fluid.

We thought the cyst to be the cause of the intussusception. The invaginated ileum and colon were edematous with some dark spots, but no definite gangrenous areas were observed. A small cigarette drain was inserted down to the head of the caecum, along side the cecostomy catheter. The wound was closed in layers up to the point of drainage.

There was considerable shock apparent during the reduction of the invagination, but when this was accomplished, the pulse began to pick up. The child was returned to bed and the following orders given:

Normal saline 100 cc with 2½% glucose subcutaneously q 4 h. Paregoric grt. X. p.r.n. for pain or restlessness. Panopepton and dextrose of each z l in water q 6 h.

Next morning the child was conscious, ravenously hungry and had a fair pulse.

At 9:30 A. M. there was an evacuation of two ounces of dark blood and at 10:00 A. M. another movement of five ounces of bright red blood. The pulse failed rapidly and death ensued in a short time. No autopsy was obtained, but the cause of death was thought to be from hemorrhage of the bowel—presumably from the erosion of a vessel at some necrotic spot.

Conclusion

The nearest approach to a similar case that I have found in the literature is one reported by Dr. Albert E. Halstead of Chicago. His case was practically the same as this one, except that in his, there was no eversion of the appendix. With some changes in detail I have used some of his descriptive drawings to illustrate this case.

Dr. Holt in 188 cases of intussusception found the tumor mass to be protruding from the anus in 22.

I wish to emphasize the importance of a thorough physical examination on every case of sudden abdominal pain for some surgical condition like acute appendicitis or intussusception might be found.

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DISCUSSION ON PAPER OF DR. SELMAN

Dr. Cleveland Thompson, Millen: Dr. Selman has given us a very thorough exposition of intussusception as it occurs in children. He has also reported a typical case that illustrated the symptoms and pathology in every stage of the condition. I heartily endorse everything he has said in the paper. Personally, I have seen only one case of intussusception and that occurred when I was house surgeon in a hospital, long ago. A mother brought in a year old baby that was in collapse, at about seven o'clock one evening. She stated that the baby had been perfectly well until about three hours before when it drew up in intense pain. It vomited, the bowels moved twice and then the child went into collapse. Examination showed the child pale, the pulse very small and rapid, and the abdomen seemed to be entirely empty. It was almost unbelievable that the child had any intestines, it seemed as if they had been removed. Palpation showed a sausage-shaped mass in the region of the sigmoid. A diagnosis of intussusception was made and at operation the cecum, the ascending colon and the transverse colon were telescoped into the descending colon well down in the sigmoid. The child died six hours later from shock and collapse.

My nineteen years in the practice of medicine and surgery leads me to the conclusion that any patient, old or young, who is seized with sudden abdominal pain or cramps that are not relieved shortly without narcotics demands at least surgical consultation. I am so firmly convinced of this that I wish to repeat that *any patient who develops sudden abdominal pain or cramps that are not relieved without a narcotic demands at least surgical consultation.*

I wish to thank Dr. Selman for bringing this condition to our attention.

Dr. Charles Usher, Savannah: I had a case similar to this except that it occurred in a grown person. I saw the patient about a week before he entered the hospital and advised him to go immediately, but he did not come in for a week. Upon opening the abdomen, we found the appendix and small intestine invaginated up to a little above the hepatic flexure. We reduced this and found an acute appendicitis. He also had a napkin

ring carcinoma just opposite where the small intestine joins the colon. We did a resection and an end-to-side anastomosis. The little loop that was left at the end of the colon we closed with a double pursestring suture, and then pulled this little loop up and instead of putting in a catheter in this case we left the pursestring suture and drew it up to the abdominal wall and put in a sponge down to it and closed around that. The following day we removed the sponge, and a few days later cut the suture. If things had not gone well we intended to pull on the pursestring suture, stick in a pair of forceps, and open up, leaving a fecal fistula, but this was not necessary.

Dr. Miller T. Harrison, Atlanta: The paper and discussion on this timely subject have been enjoyed. The cases of intussusception that have come under my observation have been of the ileocecal type. It is very important in the reduction of the intussusception to push or rather milk the intussuscepted gut out, rather than to make the reduction by pulling. In order to lessen the possibility of a recurrence two rows of number 1 chromic catgut are run through the mesentery near its attachment to the intestine. This acts as a temporary splint and serves to prevent a tendency toward recurrence. This technique was thought to be original but it was first advocated by an English surgeon many years ago.

In these cases we remove the appendix but do not attempt to invert the stump.

Dr. O. H. Weaver, Macon: The case Dr. Selman has reported I consider decidedly unique. I have never read of a case that had all of the features which this one presented. The other types of intussusception are not so uncommon, but the inversion of the appendix itself I have never heard or read of, and do not see the rationale of it. All of the pressure was against any inversion of the appendix. It could go along with the cecum, but for the appendix *per se* to be turned inside out is most unusual.

It has been my privilege to have a reduction of an intussusception under manipulation and hydrostatic pressure. Another case that I was called out of town to see had a very interesting feature. I was called one Saturday night to go about seventy-five miles to see a case of intestinal obstruction of twenty-four hours' duration. I found a typical intussusception, with the tumor in the left quadrant of the abdomen. The child was a girl, aged about 8 years. I thought it

too late to attempt anything except a laparotomy but by careful manipulation I might be able to reduce it. After the patient was anesthetized I started to examine the abdomen and found it perfectly soft and flat, with no tumor mass whatever. I found there was nothing to do since the intussusception had reduced itself. I remained in the town for several hours after carrying the patient back to her room, during this time there was no recurrence of the tumor or symptoms. I returned to Macon, and the physician in charge of the case reported to me next day that the condition had entirely cleared up and that the child had natural bowel movements. Exactly a week later I received another call stating that the patient was having a recurrence of the same symptoms, as when first affected. I went down again and found the same condition, and upon opening the abdomen found a typical ileocecal intussusception, which I reduced without any particular trouble. The child had quite a mobile cecum which I anchored to lateral abdominal wall. Recovery followed and so far as I know the patient has remained well.

Dr. Floyd W. McRae, Atlanta: In three cases that I have had during the last year I have sought for the etiological factor of the intussusception. The first case was referred by Dr. _____, of Decatur, with a diagnosis of acute intussusception. At operation an intussusception of the ileocecal type was found. The appendix was removed and two weeks later there was an apparent recurrence. A tumor mass was felt and at this operation the tumor mass was found and we proved it to be a lymphosarcoma of the ileum. The patient recovered from the immediate effects of the operation, developed lymphosarcoma of the entire abdomen with all the symptoms, ascites, etc., and died.

The second case a medical man diagnosed as acute appendicitis, and later made a diagnosis of intussusception because he could feel a mass in the ileocecal region, which could also be felt rectally. At operation the mass almost reduced itself. The appendix was removed, the gut was examined carefully and aside from a slight thickening about six inches proximal to cecum nothing pathological was found. Convalescence was normal. Six months later that patient was brought back with a large palpable mass in the right lower quadrant extending beyond the midline. A barium meal and enema were negative. A diagnosis of lymphosarcoma was made. These cases show that lympho-

sarcoma may be the etiological factor in intussusception. The prognosis to a certain extent is dependent upon the diagnosis and recognition of the condition at the first operation. It is so easy to think of the ileum being merely edematous. The lymphosarcoma is not a distinct entity, but a diffuse infiltration of the submucosa of the ileum and is readily overlooked. The prognosis is always bad. The only way of helping the condition is in the early recognition and resection of the lymphosarcoma at the first operation. These patients do well under roentgenotherapy, but they all die as the effects of this treatment become lessened.

Dr. Loren Gary, Georgetown: One point I have not heard brought out is that in intussusception we do not always have simply one invagination. I have seen two to four in more than one instance, and think it is always well to look carefully over the entire gut.

Dr. W. A. Selman, Atlanta, (closing:) Another point that was not brought out is that inflamed mucus patches will sometimes be found at the area of intussusception. Dr. Gary is right that there may be more than one invagination, sometimes two or three, or even inverse invaginations, particularly of the colon. Several cases are reported in which there was reverse peristalsis in the colon and the invagination turned up-stream. There is not only the downward but the upward type to remember.

The prevention of recurrence I did not mention but a number of operations have been devised to prevent this. I think the most likely ones are those of suturing strips of peritoneum to the periphery of the bowel opposite the attachment of the peritoneal fold with its blood vessels. Others have been recommended, taking strips of omentum itself and fixing them so that the ileum cannot be invaginated into the caecum.

I thank you all for your discussion of the paper.

TINNITUS AURIUM

Analysis made by Dana W. Drury, Boston (Journal A. M. A., Nov. 17, 1928), of 1,000 cases at the Evans Memorial, 585 of which were demonstrably endocrine, showed an incidence of tinnitus in 35.6 per cent of the endocrine cases and 32.7 per cent in the nonendocrine cases. Further analysis of the non-endocrine group showed an appreciable percentage of diseases in which tinnitus is a characteristic or frequent symptom. It is concluded that while tinnitus aurium is not a characteristic symptom of ductless glandular affections, it is encountered equally often in hypofunction of all the endocrine glands.

INFANTILE ECZEMA*

Some of the Causes and Treatment

BENJAMIN BASHINSKI, M. D.

Macon

Eczema in infants seems to be becoming more and more frequent or else we Pediatricians are called upon more frequently to treat this condition. It seems to be the most common of the diseases of the skin in infancy and one disease without a single doubt that can cause more than our share of trouble.

Infantile eczema exceeds in prevalence all the other skin diseases combined, supposedly due to the exposed situation of the skin, especially the face, the delicate structure, functions of secretion, excretion and radiation of heat.

The majority of mothers are frantic because of the disfigured appearance of the baby, especially when the lesions are on the face. All of them want instant relief, and I am sorry to say this cannot be promised. So many mothers have been advised not to pay too much attention to the eczema because the baby will either outgrow it or that it is caused by teething.

Infantile eczema seems to be confined to the face, especially the cheeks, around the shoulders, scalp, ears, buttocks and in the fold of the elbow and the knee. The most common types are the papular and vesicopustular. Two general types are found, the exudative or wet type and the dry type. The wet type is usually found in the very fat babies and the dry type in the malnutritive babies.

As to the etiology: The greatest age of susceptibility is from one to sixteen or eighteen months of age. The physical condition does not exert any influence upon the development of infantile eczema. I have repeatedly found it in the healthy nursing babies as well as malnutritive ones.

The etiology seems to be unlimited. One is most confused here. I will quote a number. According to Doctor Otto H. Foer-

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ter, it is both local and internal. Cold, soap, dirt, maceration, friction, decomposition products, medicinal application, errors of metabolism, overfeeding, underfeeding, digestive disturbances, excess of fats, excess of starch.

The exudative diathesis of Czerny, Finkelstein holds that the mineral matter of the diet is responsible.

Blackfan, Schloss and Engman and others claim a high percentage of protein, most frequently to the egg, and in this connection I want to quote from Doctor Abt in his 1927 Year Book, "The pendulum is now, as it has always been, a restless marker of time. After we have thought to have discovered that egg was contra-indicated in exudative diathesis, and that it is capable of producing anaphylactic reactions, we now rediscover that our previous impressions were based on error."

Other eczema caused by faulty elimination, too frequent or irregular feedings, too early or excessive use of various articles of diet, heat, dry air and hard water.

I do know that infantile eczema is more severe during the cold months and seems to disappear with the approach of warm and hot months. I am of the opinion of Doctor Picard that the therapeutic action of face masks with tar or other ointments is due to the masks excluding the cold and not to the medication.

In my opinion, the majority of infantile eczema cases are due to too much starch because of the fact the greatest majority of cases are seen from the twelfth to the eighteenth month and it is at this age that we are feeding a large amount of starchy foods, especially the cereals. In fact, we begin with the cereals, adding starches later by giving Irish potatoes and toast, crackers or zweiback.

According to Morse the most common cause is the delicacy of the skin of infants, that when due to the protein sensitization, the babies are very often poorly nourished, and that when caused by too much food, too rich food, or an excess of one of the food elements, they are usually fat and healthy in other ways.

As to the pathology: The changes involve both epidermis and corium. In acute eczema, the epidermis is edematous and vesicles are formed. The corium shows vascular dilatation and edema. If of long standing, the entire corium is involved down to the subcutaneous layer.

There exists one form of infantile eczema that I have never found a description of in any text book or magazine. My attention was called to this type by my former teacher and Dean, the late Doctor Isadore Dyer of Tulane. He gave it the name of "Butterfly Eczema" because of the appearance on the cheeks. The wings are formed on each side of the cheek joined by an eczematous band across the nose. He was most positive that this was a reflex condition caused by an adherent prepuce or clitoris. I have had several cases of this type and in every case complete recovery took place after circumcision or releasing an adherent clitoris. A change in diet was not made and neither was medication used in these cases either before or after operation, therefore this must be the cause of this particular type of eczema.

The diagnosis of infantile eczema is usually made with little difficulty, but other conditions may confuse you at times, such as scabies, syphilis, some forms of impetigo and ring worm.

Scabies have a tendency to affect other parts of the body. You can always find burrows especially between the fingers and axilla, as well as other members of the family having the disease.

Syphilis is at times most confusing as often syphilis in infants tends to exudate. Eczema is bright red, as a rule acute, very irritating, confined to the cheeks, forehead, around the shoulders and neck. Syphilis gives us a dark color, bilateral and symmetrical, is not irritating, lesions may be found in the mouth as well as the old established peeling of the palm of the hand and soles of the feet, also the associated syphilitic snuffles.

Impetigo is found as discrete vesicles which may be so extensive as to coalesce, but always form yellow granular crusts.

Ring worm lesions may be seen in their characteristic form, circular, but these too may coalesce so as to confuse one in making a diagnosis.

It is not good form to give a prognosis in infantile eczema, that is to the time to effect a cure. Never give a definite prognosis. To quote Doctor John Lovett Morse, "It is safe to say that it will not prove fatal to the baby, even if it does half kill the mother, and that it will eventually stop, either because of or in spite of the treatment."

It is of long duration and there is little tendency to spontaneous recovery. Treatment must continue for several months. About the only complication is an enlargement of the lymphatic glands especially postauricular and an examination of this is always called to your attention by the mother. Some of her friends have diagnosed it as a positive mastoid.

Regardless of the causes and varieties of infantile eczema the one point in the mind of the mother is what may I do to relieve the condition. In the beginning we must stress the point that we are dealing with a slow process and that it will require many weeks perhaps months before recovery is complete.

As to the treatment: The study of the stools should be very important as here we can see if the fats or starches are at fault. Practically every case of infantile eczema needs systemic, dietetic and local treatment plus strict cooperation between the mother and physician. Treatment cannot be reduced to any stock prescription. We must treat every case as an individual.

Itching is one of the main symptoms, and one of the most popular drugs to relieve this is Carbolic Acid and when we use this drug we cause more trouble because this too is irritant to an already irritating skin. Another mistake made so often is the giving of bromides to control the itching. So many infants are sensitive to bromide. We are in trouble again because of a bromide rash which is, as a rule, as irritating as the eczema, not to say anything of the aesthetic side. Calamine lotion seems to relieve the itching more than any other application and is not irri-

tating, in fact, the more acute the stage the more soothing it should be. Powder or Calamine should not be used in the weeping type because they cake and cause more irritation.

In the dry type an oily preparation should be used and the best is olive oil. In this type a modified or weak Lassar's paste is useful. Boric acid ointment or cold cream may be used.

Tar ointment is very effective in the chronic cases and when tar is used the English crude coal tar seems to give the best results. Practically all of the eczemas seem to respond better when we eliminate toilet soaps and if we use bran or olive oil to cleanse the skin.

The giving of thyroid or parathyroid extracts is, as a rule, a waste of time. I have used it repeatedly without a single case being benefited. I do not believe that in many cases giving Sodium Salicylate and Sodium Benzoate in small doses has been effective.

In a very few cases the restriction of sugar has relieved the condition especially where the eczema is found in the folds of the elbow and knees as well as the abdomen.

In the Archives of Pediatrics, January, 1928, Doctor Israel Binder reported fourteen cases treated most effectively by giving injections of triple distilled water, giving from one to four injections resulting in a cure.

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DISCUSSION ON PAPER OF DR. BASHINSKI

Dr. F. P. Norman, Columbus: Dr. Bashinski has condensed all of the known facts concerning eczema into one of the most wonderful papers I have ever heard. The greatest difficulty we have in these cases is that we do not take the trouble to get a detailed history from the mother. We look at them and see whether they are wet or dry and give them a prescription. If we get an accurate history, particularly about the child's food, and how much it eats, how much fruit and fruit juices, we can frequently get an insight into the cause of these eczemas.

As to local treatment, Dr. Bashinski mentioned specifically that they require local,

systemic and dietetic treatment, and he made no truer statement than that. We cannot take one of these cases and treat it locally or systemically and get results. It requires all three types to get the effect we desire. The local treatments are numerous and formulas can be obtained from any standard textbook. One mistake we make in the local treatment is that we frequently use a very valuable remedy at the wrong stage of the disease. We make a mistake in the time we use it. Most of my cases have been due to an excessive amount of fat, especially after the child has been off the breast for some time. We can substitute buttermilk or protein milk for the white milk the child has been taking.

I have not had much success with the skin sensitization tests, although I have tried them a number of times without benefit to the patient. It takes a really capable man to take one of these cases that affect the face and scalp and keep the child comfortable and the mother satisfied. We must be diplomats to do that.

I thank Dr. Bashinski for his paper, for I enjoyed it very much indeed.

Dr. Hal M. Davison, Atlanta: I do not have to treat these cases, but I have patients referred to me for the skin sensitization tests, and as a conservative physician I think we cannot throw aside the immunologic part of any skin eczema. We know we can diagnose 90 per cent of the cases of hay fever, around 70 to 80 per cent of the asthmas, but we cannot give any estimation of the skin cases because we have not a sufficient number of tests as yet. The old idea about all these skin conditions was that most of them were caused by some protein food, such as meat, or egg, or milk, but the largest percentage of positive reactions I have obtained in children have been among the starches. Probably it is a protein element in the starch that causes it. Wheat, oatmeal, rice and barley often give reactions, and we sometimes get a reaction to every cereal we try. One thing that has been proven about tests is that the mothers will not permit them. We give a few tests and the mothers will not come back. Coca has shown that we can take the blood of the child and inject it into the skin of an adult and twenty-four hours later test the injected area and obtain a positive reaction, and this sensitization will last for thirty days.

Another thing, I get a good many children with asthma at school age or under, and I think I can say without doubt that 50 per cent of these children give a history of eczema

BASAL METABOLISM IN NORMAL CHILDREN FROM SIX TO TWELVE YEARS OF AGE*

GEORGE F. KLUGH, M. D.

Atlanta

The practical application of the exhaustive studies on basal metabolism has received considerable attention in the last few years through the perfection of simpler machines for the estimation of basal metabolism. Our present knowledge of basal metabolism is based on the discovery of the relation of oxygen to respiration and metabolism by Lavoisier about one hundred and fifty years ago. Metabolism in the human and other animals is largely a matter of oxygen consumption. A normal person of a certain height, weight, age and sex at rest and without food will produce a definite number of calories through the body activities in a given length of time. This may be measured with sufficient accuracy for clinical purposes by the amount of oxygen consumed, since practically the same amount of oxygen is required to produce a certain number of calories regardless of the kind of food being metabolized. Basal metabolism is the term used to signify the metabolic rate as determined in the morning without food and exercise. It has been found that it is possible to have the average patient ride to the office and have the test done without appreciably affecting the rate, provided he rests twenty or thirty minutes before the test is made. The metabolic rate is remarkably constant in normal persons, being similar in this respect to pulse and temperature. This being true, it follows that in basal metabolism we have a new test to help us in our studies of various conditions in which disorders of metabolism are found. Since the various factors which increase the metabolic rate also increase the pulse rate we usually find a definite pulse rate metabolic rate ratio. Food, exercise, excitement and fevers increase the metabolic rate in normal persons. Undernutrition lowers the metabolic rate.

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Thyroid disorders have provided the greatest field of usefulness for the basal metabolism tests. Obscure cases of nervousness with rapid pulse are frequently cleared up by basal metabolism findings. Clinical hyperthyroidism can be definitely classified as to degree of severity by basal metabolic rates which serve as a check on diagnosis and character of treatment. Hypothyroidism of varying degrees is not an unusual finding, and the basal metabolism readings serve as a check on clinical symptoms due to lowered metabolism with an accumulation of products of faulty metabolism.

Basal metabolism tests are merely a part of the symptom complex in any given case, and should be so regarded. No case should be diagnosed solely on the basal metabolic reading. Before using these tests on clinical cases it is well to check your machine by running several tests on normal subjects. Properly controlled tests will often give a clearer insight into an obscure condition. Future studies will undoubtedly enlarge their sphere of usefulness. Metabolism in adults has been studied sufficiently to give us suitable working standards. Basal metabolism in children has not been so thoroughly studied, consequently the present tables are unsatisfactory. The Benedict and Talbot standards are considered the best available. They are based on tests made under absolute basal conditions, which give lower rates than those under which our tests are made. Having found a Sanborn machine perfectly satisfactory in making metabolic readings on adults, and finding readings on children higher than expected from clinical conditions, I decided to run a series of tests on normal children between the ages of six and twelve years as a basis for future studies on abnormal children. The tests were made in the same way and under the same conditions as our tests on adults. The children rode to the office without breakfast and were tested after a rest period of twenty to thirty minutes. The children were apparently normal white American school children making their grades in school. They came from different nationalities and from different parts of Atlanta, forming a fairly representative group.

Twenty-six different children were studied and fifty tests were made with an average of plus 16% above the Benedict and Talbot tables. The average rates on first tests and on repeated tests were practically the same. The highest reading was plus 39% in a child running consistently high and the lowest was minus 4% in a child running consistently low. If we add plus 15% to the Benedict and Talbot tables and allow 15% variation plus and minus from this standard practically all of the tests would be included. The children used in these tests were already acquainted either with one of my technicians or myself and the element of fear was not apparent in the first or subsequent tests. Fourteen children were given two to four tests and these readings were fairly constant for each child. The variations ranged from 0 to plus 16% between lowest and highest. There seems to be very little variations in the different years that cannot be accounted for by individual variations in the children. Children seem to cooperate fully as well as adults, and make as good tracings. For small children, it was found necessary to trim the flange on the ordinary mouthpiece slightly. Five years is the youngest on which I have been able to get a satisfactory tracing.

This series is small and the results are by no means considered final; but are given as a preliminary report to be revised if warranted by further tests.

DISCUSSION ON PAPER OF DR. KLUGH

Dr. Joseph Yampolsky, Atlanta: As you probably know, basal metabolism has been found a success for establishing hypo and hyper-thyroidism, inflammation of the pituitary gland, dyscrasia of the gland and also in eczema. However, from the little experience I have had I would not venture to say that the basal metabolism reading on a child under eight years of age would be of value. I am glad that Dr. Klugh has found this work possible and has had the cooperation of the children. Dr. ——— said that he has been unable to get the cooperation of a child under this age, and for that purpose he has an especially equipped chamber where the child can breathe as it likes, and even though he says the charts can be read by any-

one, they can be interpreted by very few. Even at that, I do not know the basal metabolism readings are of great value in children. Most of the cases we attempt to treat are hypo- or hyperthyroid, and I think in those cases the simple test of using thyroid or iodine will show us the condition. Also in eczema, in cases in which it is due to a deficiency of the thyroid, by giving the children thyroid extract we can get results.

I do not wish to discourage Dr. Klugh in his findings, for I know he is a very careful observer, but I feel that to get the cooperation of these young children and get a real reading requires a most careful observation and a very careful interpretation. These machines are sold so easily and worked so easily that everyone can take the apparatus to his office and before long will be doing stunts with the machine. I am glad we have men in the State of Georgia who are attempting to get such readings, and perhaps in the next few years, with experience, we will have readings which are of some real value. I thank Dr. Klugh for the work he has done and hope it will prove of value.

Dr. Charles E. Waits, Atlanta: Dr. Klugh deserves special credit for this splendid piece of work. I doubt if many of you fully appreciate just how much time and patience has been required in the compilation of this data.

The literature concerning this particular phase of thyroid work is scant because too few laboratory men have indulged their patience sufficiently to gather reliable statistics on basal metabolism in children under twelve years of age.

One may be able to determine by the history and physical examination whether or not a child has cretinism hypo or hyperthyroidism, but the study of these patients is not complete without a determination of basal metabolism, and certainly intelligent treatment of thyroid disorders cannot be practiced without this laboratory aid.

Such data as Dr. Klugh has given us will improve very materially our present standards upon which basal metabolism is determined in young children.

Dr. George F. Klugh, Atlanta, (closing): I wish to thank Dr. Yampolsky and Dr. Waits for their discussion. I realize that this work as it stands does not mean very much, except that it is just fifty tests as a start. I intend to follow this up with more tests until I can get a series that really amounts to something. All of the tests on children that

(Continued on Page 512)

COMPLICATIONS SOMETIMES OVERLOOKED IN DISEASES OF CHILDREN*

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As there have been so many papers of a more technical or scientific nature presented at these meetings by men whose practice is limited to some particular field or branch of medicine, and who, naturally, see the conditions only from the standpoint of the so-called "specialist," I think it is well, occasionally, to have something from the realm of the small town general practitioner. A lot of the other papers go over our heads. Not that I would in any way discount the ability and sincerity of the man whose entire time is devoted to some particular specialty, for he is really the court of last appeal, the one to whom we go when in deep water and need help; but the paper he presents treats a disease condition as a refined product, while we men in the rural sections see the same conditions in the rough, often without laboratory aid, x-ray, etc. These men, I know, are very often justified in their criticism of us, for the blunders we make in diagnosis, but if they will just come out to the tall and un-cut timber with us, and work under similar conditions and handicaps, I expect they would make just as many. We men in the small towns have to cover the entire field of medicine, have to be the obstetrician, surgeon, gynecologist, eye, ear, nose and throat man, pediatrician, laboratory man, internist, and sometimes, the dentist, as well as spiritual, political and financial advisor. Be lenient with us, you learned specialists. We realize we have more sense than you, but, surely, you can not expect us to be perfect in all these various branches of the art.

Realizing full well the utter impossibility of discussing all the complications and sequela overlooked—not sometimes, but very often—by us general practitioners, I will present only three of the more common con-

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ditions which I think should be of special interest to us: otitis media, pyelitis and endocarditis. Here are three conditions we may encounter, either singly or in combinations, complicating almost any of the acute febrile diseases, sore throat, etc. They are sometimes overlooked in spite of the fact they occur quite frequently and should be easily recognized.

Of the three conditions, I think middle ear infection is most often encountered. Frequently, we do not realize it exists until the ear drum has ruptured spontaneously and the ear begins discharging. This is a reflection on the attending physician. It is far better to be on the alert, recognize the condition and puncture the drum, than to allow it to rupture. We are less liable to get such complications as mastoid infection, partial deafness, chronic discharging ears, meningitis, brain abscess, thrombosis of the lateral sinus, etc.

We find otitis media always a complication of some other condition, such as influenza, sore throat, common colds, typhoid fever, pneumonia, measles, diphtheria, scarlet fever and many other acute febrile conditions. Diseased tonsils, adenoid growths and nasal obstructions all are contributing factors.

There are times when the existence of a middle ear infection is unmistakable, coming on during the course of some of the conditions I have enumerated, and is evidenced by a sudden rise of temperature, severe pain in the ear—or both ears, as the case may be—or pain in the entire side of the head, or pain on pressure just in front of the external auditory canal. Then there are times when it will be easily overlooked, since we may or may not have fever and since we may or may not have earache. A sudden rise of temperature is usually of considerable importance, since it is the most constant manifestation. In some instances, however, when the involvement is serious, the patient has very little fever, or, indeed, little, if any, discomfort. The symptoms are so mild and seemingly so unimportant, in some cases, that they do not attract attention. This shows the importance of frequent examinations of

the ears, while treating these conditions. Again, the temperature may be high, ranging from one hundred and three to one hundred and five. In babies too young to indicate the location of pain, the only outward evidence we may find is restlessness, crying and putting the hand to the side of the head, or picking at the ears. We sometimes find middle ear infections with the cholera infantum syndrome; refusal of food, malnutrition, diarrhoea, anhydremia, loss of weight, fever and prostration. Pain and fever are the most constant signs, and these are by no means constant in severity or appearance. Of all the inflammatory conditions which may be met with in childhood, there is perhaps none which more frequently gives rise to obscure symptoms than middle ear infections.

By far the surest and most satisfactory way of recognizing this condition early, where there is the least possible doubt as to its existence, is by frequent examination of the ear canal. This should always be done with an ear speculum preferably, an electrically lighted one—or head mirror. Never, by taking the child to a window and attempting to see the drum by direct light. This is impossible; but with a speculum and satisfactory light, we may always recognize it.

There may be only a redness around the periphery of the membrane, due to engorgement of the vessels, which are very prominent. There may be a loss of lustre, or opaqueness of the drum. The drum may be bulging, if fluid or pus is present; if the bulging is in the upper posterior quadrant, we may suspect some involvement of the mastoid antrum. There may be a retraction of the drum, due to air being absorbed after the Eustachian tube has been sealed off by the acute inflammatory process. This condition sometimes gives rise to more pain and discomfort than the presence of pus.

If we will just remember that otitis media may occur as a secondary complication of almost any or all of the acute febrile diseases, especially, sore throat, influenza and acute head colds; if we will just take the few minutes necessary to do a satisfactory examination of the ears and do this often, there is

no reason why we should not recognize the condition every time. By doing this, we will save ourselves embarrassment and our patients unnecessary suffering and expense in the immediate attack, and probably a permanent impairment of hearing in the remote future.

In discussing pyelitis, let us consider only the inflammatory condition of the pelvis of the kidney with the presence of pus secondary to some of the acute diseases, omitting all other forms, such as those caused by renal calculi, mechanical obstruction of the ureter—by kinking, torsion, or malformations of it—also those of tubercular origin, as well as pyonephrosis and abscessed kidney.

As was the case of otitis media, we find pyelitis complicating such acute conditions as scarlet fever, diphtheria, typhoid fever, influenza, measles and tonsillitis. We find, however, that most of our cases of pyelitis follow acute diarrhoea, and, too, we find some cases coming on without apparent cause, or, at least, we can not locate the primary focus of infection. Whether the infection reaches the pelvis of the kidney through the blood stream, or through the kidney structure, or as an ascending infection through the ureter, I shall not discuss. There is a variation of opinion with evidence to support each argument. Possibly all are correct at times. It is true that any condition which may injure the lining of the kidney pelvis, or lower the resistance of the child, will make it more susceptible. This form of pyelitis is usually bilateral and is often accompanied by acute nephritis.

The condition is not such a serious one; in fact, many cases of pyelitis, not recognized and treated as such, clear up of their own accord. I wonder how many of us have failed to diagnose this one condition? How many times have we told the mother that her baby had a relapse of his primary disease, or have told her the baby had developed malaria?

Pyelitis is usually ushered in with a chill, which may or may not repeat itself, with high fever, which is very indefinite, being relapsing, or remittent, never constant. This may make us think we are dealing with a chronic malaria, which has been lighted up

by the recent illness. The nervous phenomena occurring in the beginning of this infection may suggest meningitis. The pain and tenderness of the abdomen from the inflamed kidney may simulate appendicitis.

Frequent microscopic examinations of the urine will save us many embarrassments in treating children. The presence of pus in the urine, however, is by no means constant; therefore we may have to examine several specimens before confirming our diagnosis. If the ureter becomes blocked, and the pus is not draining from the pelvis of the kidney, we may find little or none in the urine. In this case, we would expect to find the temperature high. If the pus is not pent up, but is draining freely, we will find it in the urine in abundance. At this time, we will find the temperature low. The urine is often scanty and turbid. On centrifuging, or letting the specimen stand for awhile, we may find that one-tenth, one-twentieth, or even more of the volume is pus. The urine is almost invariably acid in reaction, often decidedly so. Albumen, renal epithelium, and hyaline, granular, or epithelial casts will vary with the severity of nephritis. We are told that colon bacilli will be found present in ninety percent of pyelitis, and in the other ten percent, the various pyogenic cocci will be found as causative factors.

The average case of pyelitis, properly treated, will clear up in from two to six weeks. Some cases, however, are very refractory to treatment, and may last for years, with acute exacerbations from time to time, giving trouble in later years. Especially is this true in the child-bearing period of women. Since girls have the condition about three times as often as boys, this in itself is a strong appeal for its recognition.

Pyelitis, by the damage done to the lining of the pelvis of the kidney, certainly predisposes the formation of calculi, and the tendency to cause nephritis and pyonephrosis make of it a disease entity well worth our earnest consideration.

Let us now consider endocarditis. Of the conditions under discussion, it will be encountered less often by the general practitioner, but, because of the permanent dam-

age it may cause the heart, it is of greatest importance. It is not always easily recognized. Sometimes we are not aware of its presence until a murmur has developed, at which time the condition is well advanced.

If endocarditis is recognized, and recognized early, before any permanent damage has been done to the heart, and the child is kept absolutely quiet in bed—for weeks, or even months if necessary—on proper treatment, it may be cured, and thus the child may be spared the handicap of going through life as a cardiac cripple.

I have often wondered just how many young men, apparently sound, were found to be physically unfit for service in the recent World War because of valvular heart disease traceable to an endocarditis complicating some acute condition in early life. Certainly there were many of them. I have also wondered how many young married women, approaching their first confinement, are found to have a beginning cardiac decompensation as a result of endocarditis in childhood. Many of these cases, both men and women, have never known they had a defective heart. They were never told so, because the condition was not recognized by the family physician. They have never been instructed as to how to care for themselves, the kind of work they should do, or the amount of exercise they should take.

A case of endocarditis, with its resultant chronic valvular disease, will often influence the entire life career of an individual. Is it not important then, that we put forth our best efforts to recognize this condition in its incipency, since by doing so the condition can often be corrected?

As was the case of otitis-media and pyelitis, we find endocarditis a secondary condition, caused by micro-organisms, usually the streptococcus, staphylococcus or pneumococcus. We find it associated with many of the same old conditions, namely, tonsillitis, influenza, diphtheria, scarlet fever, measles and pneumonia. Most frequently, however, we find it associated with acute rheumatic fever.

I am discussing now acute endocarditis—both mild and malignant—which is an inflammation of the endocardium, generally

confined to the region of the valves. The valves most often involved are the mitral and aortic. The inflammation may be only slight, or there may be an actual ulceration, with loss of tissue. Vegetations may be formed on the inflamed surfaces, which may become detached and be carried away by the blood stream to cause embolic obstruction in remote parts of the body. Adhesions, distortions or contractions of the valves, occurring from the healing of these lesions, will cause permanent damage to the heart.

We must remember that we rarely find endocarditis without some myocarditis. It is often difficult to decide when endocarditis has developed. It is almost invariably secondary to some of the acute conditions I have mentioned. Probably seventy percent of endocarditis is secondary to acute rheumatic fever. Infected tonsils are frequently the primary cause of many cases.

Repeated and careful examination of the heart during the treatment of all acute infections will often show signs of endocarditis, or myocarditis, which so often accompanies it. Even though the onset may be insidious and with few subjective symptoms, we may find an unexplainable rise of temperature, pain and discomfort in the region of the heart, slight dyspnoea, rapid pulse rate and lowered blood pressure. The child may sleep poorly or be nervous and restless. We will sometimes find evidences of infective emboli or petechiae over the body. There is usually a diminished intensity of the apex beat and diffusion of apex impulse, and the valve sounds are sometimes muffled. Sooner or later we may find a murmur has developed. This murmur may be systolic or diastolic, depending upon whether a regurgitation or a stenosis has occurred. Of course, the location of the murmur will vary according to the valve involved.

Very often, following an acute endocarditis, one or more valves of the heart will be found to be permanently damaged, and thus condemn an individual to a life of diminished activity and earning power. Indeed, it may make of him a cripple for life, or he may, through ignorance of his condition, do something which will bring on cardiac de-

compensation and an untimely death. Many cases of endocarditis, if recognized early and properly treated, can be cured, or, to say the least, the child can be taught to protect himself by refraining from athletic activity in early life, and later select a vocation which will be best suited to the demands of his heart lesion.

Let us then remember that endocarditis is a serious condition; that it is a complication of many acute inflammatory conditions, that it is the fore-runner of chronic valvular heart disease—a condition that will handicap an individual for life—and that it is often preventable, or, at least, amenable to treatment.

DISCUSSION ON PAPER OF DR. MCGILL

Dr. George F. Klugh, Atlanta: I wish to congratulate Dr. McGill. Most of the outstanding discoveries in medicine have been made by general practitioners, Crawford W. Long, J. Marion Sims, and a host of others. I was a general practitioner in the country for seven years, and I think one reason the country practitioner contributes so much is because when he is up against it he has to do something for himself and his patient. Another reason is that he has time, in going from one patient to another, often a distance of several miles, to think things over. The paper is very interesting, particularly because the conditions to which Dr. McGill has called our attention are common conditions in children, and three of the most serious conditions we have. Any common cold, any respiratory tract infection, has a possibility of causing an otitis media, a pyelitis, an endocarditis, and numerous other complications. I think every sick child should have a careful throat examination, a head examination, and a urinalysis, as well as other physical examinations at frequent intervals.

Dr. Robert E. McGill, Montezuma, (closing): I did so much extemporaneous talking that I did not have time to finish my paper, and will use my closing time for that purpose, if you will bear with me.

TREATMENT OF VARICOSE VEINS AND ULCERS*

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We have no doubt, but that every doctor of the Eighth District Medical Association, when he saw the subject of treatment of varicose veins and ulcers on the program, thought that it would be an old and uninteresting subject. True, it is an old subject, about which much has been written, but the very number of the plans for treatment is an indication of the lack of uniformity of results. Perhaps, no other apparently trivial condition taxes the patience of the physician or causes the patient more discomfort, pain, and loss of time than does this condition. We have in our 29 years of practice encountered numerous patients with varicose ulcers, for whom I would have given almost anything for a therapeutic measure which would cure them.

Like most doctors. We told them if they wanted a cure they would have to attack the trouble from a surgical standpoint. All of us know, that most patients are not going to have a surgical operation unless they are in actual pain or the condition seriously interferes with their occupation of making a living. How often we have given these patients rubber bandages, elastic stockings, and some form of "hit or miss" ointment, knowing that they will get very little relief from our treatment. These ulcers become indurated and chronic and the doctor and the patient both become tired of each other; there develops a lack of interest and indifference by both patient and doctor and thus the patient drifts from one physician to another and finally becoming disgusted, will either treat the condition himself or use patent nostrums.

There are two headings under which I think that a doctor is justifiable in bringing a subject to the attention of a medical group of men. First, if he has discovered some therapeutic measure, that is of value to suf-

fering mankind, it is his duty to report it. Second, if he knows of some therapeutic measure, old or new, which is not being used as it should be, it is his duty to call the attention of the group to this fact. My paper qualifies under the second heading, that is, a treatment, which has been found to give the best results in the treatment of varicose ulcers, namely, the use of Unna's dressing.

Before taking up the treatment, we think that it is best that we review the etiology and pathology, so that the treatment may be better understood. An ulcer may be defined as a lesion of the skin or mucous membrane, characterized by loss of tissues, more or less superficial, with slight tendency to heal. This loss of tissue in any location has circulatory stasis as an important factor, but in the case of varicose veins it is the predominant factor. Normally, the circulatory mechanism is adjusted so the return flow of blood from the feet is able to get back to the heart with individual in erect posture. Anything which tends to obstruct this flow, tends to cause varicose veins. Under this head we have, too much standing or walking, pregnancies, thrombosis of one of the large veins draining the leg, tight garters around the legs, and any other condition in which there is a tendency for obstruction of the venous return. It is thought by some that sedentary occupations tend to cause a decrease in the tone of the vessel walls and thus become a factor in the production of varicose veins. In addition to these, one might add congenital deficiency or weakness of the valves of the veins.

Whatever be the cause of the varicosities, the stagnation of the blood in the dilated veins leads to a local impairment of the tissue metabolism and indeed sets up a vicious cycle; in that the local impairment tends to weaken the walls of the vessels which in turn causes more stagnation and thus furthers the damage. All of this causes a lowering of the resistance of the part and thus any trauma or infection to this vulnerable tissue may lead to ulcer formation. In varicose ulcers, we usually have a history of trauma or slight infection precipitating the condition. In the healing of the ulcer the restoration of the lo-

cal circulation and the elimination of the stasis is important. An important secondary consideration, as to prognosis and treatment, is the amount of induration or scar tissue formation in the edges of and around the ulcer. The size of the ulcer being much less important than the amount of induration, as this in itself may cause circulatory impairment of the ulcerated area and thus tends to perpetuate the ulcer. The involvement of the nerve endings in this scar tissue accounts to some extent for the pain and tenderness of the ulcer.

All of the large clinics of today seem to show that there is an increase of varicose veins and ulcers during the last few years, especially in women. This is explained by the return to the use of tight garters and rolled stockings. Many years ago the Janice Miller dress reform movement stressed the point of the garter constricting the return flow of blood and urged the adoption of methods of fastening the garters to the corset, and an adoption of this plan lead to a reduction in the number of varicose veins and ulcers. During the last few years the corsets have been discarded to a great extent and the garter has come back into prominence with an increase in the number of varicose ulcers.

No matter what the condition, a rational treatment is based upon the elimination of the causative factor. This holds for varicose ulcers. One should attempt to remove the cause of the stagnation of blood as much as possible. The treatment of the local condition depends to a great extent upon the condition of the veins and the induration of the ulcer. One should know whether the valves of both the superficial and perforating veins are intact. Two simple procedures can be used for this. For the superficial veins the Trendelenburg test is used. This test is based upon the competence of the valves of the internal saphenous vein. To do this, one may let the patient stand up for a few minutes making firm pressure on the lower end of the vein with the thumb of one hand stripping the blood upward with the other hand. If the vein remains collapsed the sign is negative. Another method is to raise the leg above the level of the heart and allowing the

blood to drain thoroughly from the part; then lowering the limb watching for a refill of the saphenous vein from above. If the valves are incompetent it will refill rapidly with a perceptible shock, in which case the sign is said to be positive and a permanent successful treatment cannot be obtained without surgical treatment.

To test for varices of the perforating vessels, after the blood has been drained from the extremity, a constrictor is placed about the upper thigh and tightened enough to cut off the return flow through the saphenous. Now lowering the part, we then time the refilling of the saphenous. If it remains flat for one half to one minute, the perforating vessels are intact. But should it fill in 10 to 20 seconds, we know that varicosities are present in the perforating veins and to get permanent results these require surgical treatment. Dr. Ochsner of Chicago in a recent article says that he has had to treat surgically only about 10% of his cases in the last 25 years.

The technic of the use of Unna's boot in those cases not requiring surgical treatment is as follows. To prepare Unna's paste, take an ordinary double boiler. Fill the outer part one third full of water. Place ten ounces of cold water in the inner vessel; to which is added four ounces of ordinary grocer's sheet gelatin. This may stand over night until the gelatin is dissolved or it may be immediately dissolved by heating, using the outer vessel as a water bath. While still hot, add ten ounces of glycerin; then slowly add four ounces of zinc oxide stirring constantly to get thoroughly mixed. The paste is now ready to be used or it may be put in a can with an air-tight cover and kept for future use, it being necessary to melt over water bath before applying. In applying be careful that it is not too hot, 110 degrees F., being sufficient to melt the paste.

The melted paste is applied with an ordinary two inch paint brush, covering the leg from the head of the metatarsals to just below the knee; that is, from the toes to just below the knee, but not covering the knee; Over this one may apply a woman's white cotton seamless stocking drawing it up snug-

ly so that there are no folds, or one can put the bandage directly without the use of the stocking. Each layer of bandage is covered with the paste, working the paste well into the fabric of the bandage. A linton gauze bandage of two and one-half inch width is used. It is put on without traction and without reversing. It being better to make only one turn around the leg and then to cut the bandage and start again. The above procedure is repeated until five or six layers have been applied from the toes to just below the knee. The position of the leg during application is with the knee flexed and the ankle a little less than a right angle. The boot is allowed to dry and then powdered well with ordinary talcum powder. Over this the stocking can be applied and then the shoe and the patient can then go about his business. This can be left on from one week to four months if comfortable or until it loses its supportive power or becomes soiled by secretions from the ulcer coming through the boot. In some cases where the extremity is swollen, it is necessary to elevate the limb for one night before applying the boot.

If an ulcer exists, it should be thoroughly cleaned with alcohol or benzine, then paint the ulcer with the paste, apply a layer of gauze then a layer of paint until about twenty layers have been applied. The boot is then applied over this as for simple varicosities. Secretions prevent the boot from being left on as long as for the simple varicosities, but when the boot becomes soiled it can be removed and another applied. The use of the boot can be continued until the skin and veins are normal.

This treatment has a number of advantages. First, the patient is not put to bed but is allowed to go about his normal work, thus saving him a great amount of time, and in the case of institutions, a great deal of expense. Second, he does not have to undergo the pain, expense, etc., of a surgical operation. Third, the boot fits the leg better than one could ever hope to get with rubber stockings or bandages. Fourth, the patient keeps this on both day and night, differing from the stocking or bandage which are often removed at night thus losing the value of the treat-

ment gained through the day. Fifth, the treatment is not expensive and once learned is easy to carry out. The little added work to the physician being more than compensated for by the results and the gratitude of the patient.

Conclusions:

(1) Varicose veins and ulcers are conditions which have not received the care they deserve.

(2) They are due to local lowering of resistance of the part caused by circulatory stasis. Being favored by anything causing circulatory stasis and seeming to be more common than formerly.

(3) A rationale treatment is based on the removal of predisposing causes in so far as it is practical, the testing out of the saphenous vein and perforating veins for competency of their valves.

(4) Where the valves are competent and surgery is not required, the use of Unna's boot as described above.

(5) This boot having the advantages, that the patient is ambulatory, it gives correct support to the veins of the leg, gives support at night as well as during the day and cannot be removed by the patient, does not require frequent dressing, which even with the utmost care destroys the newly formed epithelium and prolongs the healing, and lastly, it is non-expensive and easily applied, giving good results in the majority of cases.

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OUR TUBERCULOSIS PROBLEM*

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Griffin

Tuberculosis is the most wide spread and universal of all the major infections. No nation, clime or country is exempt from its ravages. It is said that nearly all of us have had a slight touch of the White Plague, which Bunyan so aptly termed, "The Captain of the Men of Death."

It is estimated that in Germany 12%, and United States 9% of all deaths is caused by Tuberculosis and sad to relate the toll falls heaviest during that period of life of greatest usefulness. It is stated by good authority that 100,000 persons die annually in the United States from Tuberculosis and of the 112 or more millions of people now living in this country, 9 millions will become victims of this disease, unless preventive measures are used to check it. What a great opportunity presents itself to physicians, Health organizations, welfare workers and anti-tuberculosis associations to control and to a great extent, eradicate from our nation this most relentless and exacting of all diseases to which human flesh is heir. Beitzski of Berlin, performed autopsies on 1100 bodies of all ages and found evidences of tuberculosis in 27.3 per cent. of children under 15 years of age, and 58.2 per cent. in those over 15 years. Todd found tuberculosis lesions in 69 per cent. of 386 persons dying with diseases other than tuberculosis.

Naegeli of Zurich after post-mortem examinations on a very large number of bodies, found evidence of tuberculosis in over 90 per cent. Thus we find that consumption is not only a universal, but a very common local disease.

Like the poor we will have tuberculosis always with us. The most susceptible period of life is childhood and it is estimated that 90 per cent. of all cases of tuberculosis begin in the early stages of life, and that in adolescence and young adult life, reactivation of the disease is most probable. Tuberculo-

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sis is more prevalent with the poorer classes than those that are well to do and in those living in more favorable sanitary conditions. The negroes in our Southland are very susceptible which, with the existing unsanitary environment, increases both the morbidity and mortality.

The famous German scientist Dr. Koch, in 1882, in his famous communication, published to the scientific world that tuberculosis was caused by a specific micro-organism; The Tubercle Bacillus. This important discovery revealed the fact that tuberculosis was a germ disease and that the germ was transmitted from a sick to a well person only by means of the sputum containing the bacilli. This opened up a new field of investigation, and scientists and research workers actively begun a search for both a cure and preventive.

Dr. Koch thought he had discovered a preventive and cure in Tuberculin, the killed Tubercle Bacilli, but after sufficient trial found it was of no value except as a diagnostic aid. I am persuaded that the time is not far in the future when science will discover a specific vaccine for the immunization of all infants to tuberculosis. Now our resources are limited to the agencies that nature so abundantly and lavishly gives us. So far, the only protection we have against the invasion of the disease germ is by prevention and sanitation. The old adage that "An ounce of prevention is worth a pound of cure" is amply demonstrated in the prevention of tuberculosis and we, as physicians and health workers, are as much or more interested in protecting the well from infection as in arresting or curing the disease in those already infected.

We are all familiar with the two varieties of tuberculosis—Human and Bovine. It is not necessary to mention the Avian. That the first is transmitted by means of the sputum containing the tubercle bacilli, and the second by means of milk from tuberculous cows. Children are very susceptible to bovine tuberculosis which shows up in enlarged cervical and thoracic tuberculous glands, enlarged joints, tabes mesenterica, etc.

The prevention of tuberculosis resolves itself into two important measures. 1st. Avoidance of infection by the tubercle bacilli; 2nd. Building up a resistance through personal hygiene. Both are very necessary, and essential to success. It is our duty as health officers, nurses, health organizations, and physicians to instruct and educate the public, as to the mode of transmission of the bacilli both by direct and indirect contact, and that only the active cases, expectorating sputum from the lungs containing bacilli, will communicate the disease to others. The public should be warned of the dangers of transmitting the disease directly by kissing, droplet infection by coughing, sneezing, or laughing within the range of a few feet of others, and the danger of promiscuous expectoration and indirectly by the use of towels, handkerchiefs, other articles of clothing and anything used or handled by the patient in eating or drinking, the danger attendant upon promiscuous expectoration and that all sputum should be destroyed by burning. The preparation or handling of food, especially milk, by the consumptive, should never be permitted. All milk consumed by children should be pasteurized or come from tuberculin tested cows. We cannot be too careful or diligent in our efforts to prevent the spread of tuberculosis. Eternal vigilance is the price of health and oftentimes of life. The early recognition and diagnosis in incipient and moderate advanced cases are very necessary, not only for the arrest or cure of the disease, but for the protection of those who do not have it. The public should be taught that fresh air, sunshine, out of door life, nutritious and wholesome food, rest and a healthful and sanitary environment will produce an increased resistance to tuberculosis. A not too strict, but modified isolation of the patient should be enforced and he should be encouraged to take every precaution against the spread of the disease.

If these measures are strictly and zealously enforced, we will have a rapid decline in the morbidity of tuberculosis. An improvement in the economic conditions of our country, better sanitary environment and improved living conditions, the increased scale of wages,

tuberculosis sanatoria and various secondary agencies such as prevention clinics, health insurance, notification, open air schools, and day and night camps, have caused a gradual decline in tuberculosis in the past 50 years. Massachusetts begun to wage a war on tuberculosis in 1850, many years before the cause of the disease was discovered, and as a result, the death rate declined from 500 deaths per 100,000 population in 1855 to 80 in 1925. The decline was gradual from 1850-1855, when the cause was discovered, but quite pronounced since that date. In the registration area of the United States, we find that tuberculosis declined from 196 deaths per 100,000 in 1900 to 95 in 1922. From 1918 to 1922 the decline was from 150 to 95 per 100,000. Thus we see that the strenuous efforts of Preventive Medicine have accomplished wonderful results in the reduction of the death rate, yet, during the same time, the morbidity of the disease has greatly increased. This can be partly accounted for by an increase in the number of cases reported and our more modern and improved methods of treatment, and also that a larger number of people possess a partial immunity, which protects them from a rapid progress of the disease and consequently a fatal termination. I will say very little in regard to the treatment of tuberculosis, as all of you are familiar with the present methods used to arrest and cure this disease. Suffice it to say that absolute rest is the "sinequa non" in the treatment and with the aid of nutritious food, especially milk, sunshine, fresh, pure air and cheerful and inviting sanitary surroundings, we have the only potent agencies conducive to desired results: viz: the ultimate recovery of our patient. The mode of obtaining these results is the question; whether to keep our patients at home and treat them, or send them to a sanatorium. Much depends on the environment, intelligence, will power and financial status. I believe the vast majority of cases of tuberculosis should be hospitalized. By so doing, they can be taught to take care of themselves, the importance of rest, the proper and nutritious foods, and the benefits derived from fresh air and sunshine. Nowhere else can they

be successfully taught these very essential measures, nor will the patient strictly adhere to so tedious and exacting a treatment, unless taught its great importance and encouraged to carry out to the letter the given instructions.

Our State Tuberculosis Sanatorium even with its recent addition, is inadequate to receive and take care of the constantly increasing cases applying for admittance to this very valuable institution. The present facilities for taking care of the children at Alto are indeed very limited, but thanks to the great and noble Masonic fraternity of Georgia, we hope soon to have an annex constructed to be used exclusively for the protection and treatment of the children of our state. Even with this long needed addition to our State Sanatorium, there are and will be vast numbers of our children who will never derive any benefits therefrom.

The object of this paper is to stress the necessity and importance of constructing a local tuberculosis sanatorium in each municipality and county financially able to do so, or the grouping of a sufficient number of counties, and the erection of a sanatorium building at a centrally located place easily accessible to the citizens of each county.

The vast majority of our patients are financially unable to bear the expense involved in our modern sanatoriums, especially if it requires a long tedious and expensive journey to reach them.

The local sanatorium, within easy reach, presents many advantages. It should not become a financial burden to the patient. It should be within reach of those members of his family most interested in him and who can visit him as often as necessary to cheer and comfort him in his affliction. We all know how important it is to keep the tuberculosis patient in a happy and cheerful frame of mind. Many comforts can be brought to him by the homefolks that he cannot procure at a sanatorium, and after the case is arrested or cured he has no fatiguing journey to make on his return trip to his home.

Especially in the treatment of children do we find that a local tuberculosis sanatorium possesses many advantages. It is almost impossible to keep a child contented removed

from its parents, associates and home life, and much more trying on the mother, who unwillingly gives up and is separated from her child or children for weeks or months. How gratifying to the mother to know that those whom she loves are not far away and within easy reach should they need her assistance.

We, as physicians, now know how much more important it is to save the children and adolescents and give to the future many lives of useful service than to try and fail to arrest the disease in those far passed the meridian of life and in whose hour glass the sands of time have almost run their course.

Let us then be up and doing to save our children and young adults from the invasion of this relentless foe of mankind by building around them the impassable bulwark of Preventive Medicine.

Let us, as physicians and humanitarians, exert every effort to arouse in the public mind by persuasion and logic the great necessity of saving our young people from the "White Plague," and that the greatest assurance of an arrest and cure of the disease lies in the erection of a suitable number of tuberculosis sanatoria all over the State of Georgia.

To say we are not financially able or that it cannot be done shows a lack of common sense and a want of faith in the good people of our state, who can and will accomplish any laudable undertaking.

BASIL METABOLISM IN NORMAL CHILDREN FROM SIX TO TWELVE YEARS OF AGE

(Continued from Page 502)

do not show hypothyroidism have always given a higher test with our machine, than Benedict and Talbot's tables would indicate. As I stated in my paper, the reason is evident. Benedict's tests are made as a rule with the child asleep and those tables are not comparable to tests taken on wide-awake children in the office. The tracings themselves will show just what they can do. I am proud of two of the cases. One of the children was five years and four months old, the other five years and six months, and those are the prettiest tracings I have in the group today.

URETERAL STRICTURE*

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Stricture of the ureter is not a new disease, but one that has been neglected. The results of this neglect, or of a mistaken diagnosis, are a tremendous loss in disability, time, hospital expense following various lines of treatment, founded on a mistaken diagnosis, and in some cases, multiple abdominal operations, undermining the nervous system, and worst of all the resulting damage to the kidney from a long standing strictured ureter. Stricture of the ureter is progressive and produces all the well known sequelae that follow obstruction or retardation of the urinary flow such as:

Urinary calculi.

Hydro ureter.

Hydronephrosis.

Pyelitis.

Pyonephrosis.

Nephroptosis.

Floating Kidney, etc.

It is also an important factor in the etiology of chronic nephritis.

The object of this paper is to impress upon you the importance of making an early and correct diagnosis.

Definition: Ureteral stricture is a disease of the ureteral wall resulting in a narrowing of the lumen, which leads to varying degrees of stasis in the urinary stream. These strictures may be filiform in size or may cause only a slight narrowing of the caliber of the ureter. They may involve only a small segment of the ureter or may extend a number of centimeters along its course.

Etiology: Focal infection is, without a doubt, the primary etiological factor. Hunner believes that most ureteral strictures originate from remote foci of infection, such as tonsillitis, sinusitis, abscessed teeth, etc., and that it is frequently laid down in childhood and is concurrent with pyelitis or pyelonephritis; that the pyelitis clears up, the ureteral lesion lying dormant, oftentimes, for years

*Read before the Eighth District Medical Association, Madison, Ga., August 8, 1928.

subsequently to be lighted up anew by some intercurrent infection, or by pressure without, as in pyelitis in pregnancy. The symptoms of ureteral stricture oftentimes begin soon after an attack of tonsillitis, sinusitis, etc., and in a great many cases it is only after the removal of the focal infection that a cure is established. Experience has taught that most ureteral strictures originate in the pelvic portion of the ureter, and on account of this some think that the local inflammatory diseases of the pelvis is the cause rather than distal focal infection. Traumatism is another cause for stricture of the ureter, it may come from a severe accident, such as a stab, gunshot wounds, automobile injuries, from injuries received at operation, or from childbirth. Inflammation from neighboring tissues may also cause stricture of the ureter. Tumors pressing on the ureter or incorporating it in its walls, will oftentimes cause the ureter to become strictured at that point. Syphilis is also responsible for an occasional case and should be kept in mind.

Symptomatology and Diagnosis: On account of the fact that this disease has but recently been called to our attention the general practitioner is likely to consider it as a rare occurrence and that its symptoms are so vague that it would be difficult to make a diagnosis, but as a matter of experience the physician who keeps this disease in mind, when considering any vague abdominal disorder, will be greatly surprised at the frequency of its occurrence.

Pain is the most universal symptom, and, as Hunner has said, "May be found anywhere from the diaphragm to the ankles." There is usually some pain or tenderness about the kidney, radiating downward and along the course of the ureter, and is more marked at the brim of the pelvis and about the broad ligaments. It may also extend down into the external genitalia or down the thigh. Pain in the back and across the hips and especially along the line of the sacroiliac joint is oftentimes ureteral in origin. Pain in the region of the ovaries is quite often diagnosed as "Ovarian Neuralgia," which is far too common a diagnosis, because it has been responsible for the sacrifice of literally

thousands of normal ovaries. "Ovarian Neuralgia" is probably more often ureteral, than ovarian pain. Pain about the gall bladder and stomach with nausea and vomiting, chills and fever, is quite often a symptom of stricture of the ureter instead of gall stones as is frequently diagnosed.

Bladder symptoms occur in about 75% of all cases of stricture of the ureter, this may be so slight that the patient has not mentioned it, and on direct question may answer "No, I have had no bladder symptoms, only a frequency at the time of menstruation," or she may connect it with a "cold" or "sore throat." We see all grades of bladder distress from this slight frequency to complete incontinence of urine.

The urine may be negative. Only about 20% show an infection, and when cultured the *B. coli* is usually the infecting organism. About 2% show a haematuria. The ureteral specimens may also be negative for pus, blood or casts. There is usually some fever in the infected cases such as pyelitis, etc., which varies from 99 to 105 degrees or even more. Fever also occurs in cases where the stricture closes, and this without infection being present.

Gastro-intestinal symptoms are not uncommon, as they occur in at least one-fifth of all cases and may vary from a slight aversion of food to extreme vomiting, gaseous distention, rectal tenesmus, pain just before and during stool, and even severe mucous colitis.

Nervous symptoms may be present in a large percentage of cases; this, in fact, may account for, and probably does, the great irritability of many persons who appear in perfectly good health.

In making a diagnosis of ureteral stricture, the first consideration is the history, which should be very carefully made and more carefully considered, and especially in cases with obscure abdominal pain. A good many of these patients have been consigned to the group of neurasthenics. Some are decorated with two or three abdominal scars, by the surgeon and the gynecologist who have been trying to aid in making a diagnosis. Some have consulted the gastrologist and others,

in an attempt to get relief, but they still complain of that vague abdominal pain, the accumulation of gas, bladder symptoms etc.

When making a physical examination include a careful bimanual palpation of both kidneys. However some kidneys can not be felt, but in most cases the right kidney in women can be palpated. The majority of kidneys above a strictured ureter are tender, and in cases where the kidney can not be felt there is usually some tenderness in the flank. The ureter should also be palpated its entire length, as you will oftentimes reveal tenderness along its course, and especially at the brim of the pelvis. Always examine the lower end of the ureter per vagina or rectum, or both, as the point of greatest tenderness is in the area of the broad ligament.

The next in order is the Cystoscopic examination and the passage of ureteral bougies and catheters which will determine the location as well as the size of the stricture. Pyelography is very satisfactory in demonstrating strictures of the ureter, and I think most strictures should be visualized as it gives you a better idea of what is actually going on above the stricture.

The treatment is usually nonsurgical and consists in relieving the local symptoms and improving the kidney functions by dilating the strictured area and restoring adequate renal drainage. The removal of any focus of infection is also a part of the program.

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FRACTURES OF BOTH BONES OF FOREARM IN ADULT

C. B. Francisco. Kansas City, Mo. (*Journal A. M. A.*, Nov. 17, 1928), favors the treatment of these fractures by combined traction and fixation. In all of twenty-five cases so treated firm union and good functional results have been secured. The average period of disability has been about four months and only in the cases of compound fracture was disability claimed. A long period of time is necessary in some cases to secure firm union. Attempts to hasten union in fractures often lead to disastrous results.

INDIGESTION*

Its Relation to Gall Bladder Disease. The Clinical Aspect of Cholecystic Disease

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Macon

Cholecystic disease is exceedingly common; it is estimated that well over ten per cent of all post mortems show pathological changes in the gall bladder, and in half or more, of these cases stones are present.

Brockbank,¹ "In 1347 autopsies at all ages found gall stones in nineteen per cent."

Halk,² "In 1440 autopsies on subjects over fifty years of age found gall stones in twenty-nine percent."

*Kelley*³ says: "That seventy-five percent, or more, of the cases of cholecystitis with stone are found in patients over forty years of age."

*Eusterman*⁴ says: "That cholecystic disease may occur at any age, though it is rare under the age of twenty."

*Hurst*⁵ says: "That in at least ten percent of all persons over the age of twenty gall stones are found after death."

Disease of the gall bladder and biliary tract is the most common of all abdominal lesions.

Out of 2641 cases of indigestion which came to operation at the Mayo Clinic the following operative diagnoses were made, the pre-operative diagnosis being disregarded:

| | |
|--|-----|
| (Cholecystitis 14%—Cholelithiasis 23%) | |
| Cholecystitis, with and without stone | 37% |
| Appendicitis | 32% |
| Duodenal ulcer | 20% |
| Cancer | 6% |
| Stomach ulcer | 5% |

In this article I have picked out certain phases of this large subject of gall bladder disease and have limited myself, so far as possible, to a consideration of subacute and chronic cholecystitis and cholelithiasis.

The function of the gall bladder is not known; the deer, horse and other solipeds are without it. Whatever its function may be, it does not seem to be altogether essential.

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Apparently its function is to concentrate and retain bile.

Rous⁶ and his associates have shown that cystic bile is eight times as rich in solids as that coming from the hepatic duct. They found that the gall bladder was able to concentrate bile quite rapidly; in twenty two hours 49.8 c.c.'s was concentrated down to 4.6 c.c.'s.

Bassler⁷ believes that the gall bladder acts as a buffer, or pressure valve, to relieve acute distension. It also in this way probably relieves strain on the liver and pancreas. The fact that the common and hepatic ducts have a tendency to dilate after cholecystectomy seems to lend support to this view.

Bile is retained in the gall bladder during the remissions of active digestion and is released when the products of digestion pass into the duodenum.

McDowell⁸ says: "It has been shown that the peptones of digestion act as a powerful stimulus to effect the relaxation of the duodenum and the Oddi muscle (The sphincter of Oddi in the ampulla of Vater.) and permit the free flow of bile from the gall bladder into the duodenum." This can be nicely demonstrated with the Graham method of X-ray study of the gall bladder.

Many of the patients with gall bladder disease present themselves as gastric cases and the outstanding symptoms are those of gastric hyperacidity and pylorospasm. In certain cases there may be an achylia.

The production of gastric symptoms in cholecystic disease leads first to a consideration of the physiology of the pyloric sphincter. The control of acidity in the normal process of digestion is brought about by the regurgitation of alkaline duodenal contents and this process is dependent upon a perfectly functioning pyloric sphincter; this mechanism can be very easily upset by organic change in the wall of the stomach or the duodenum or by reflex nervous influence.

Provided there is no inflammation of the peritoneum all gastric pain can be looked upon as being due to muscular spasm.

When pylorospasm exists, from any cause, and there is food in the stomach a hyperacidity occurs because regurgitation of alkaline

duodenal contents is prevented. The hyperacidity stimulates gastric peristalsis and when the stomach attempts to evacuate its contents and the effort is counteracted by pyloric obstruction, the stomach is unable to empty its contents into the duodenum and severe painful spasm of the stomach musculature occurs.

The same sort of muscular contractions with increased tension and the production of pain occurs in the gall bladder and biliary passages when there is interference with the outflow of bile. The character of such pain is well known.

There is close nervous association between the gall bladder, biliary tract and the stomach through the sympathetic system. Inflammation of the gall bladder is presumed to effect reflexly spasmodic closure of the pylorus, but this probably usually occurs in the presence of some actual pathological associated lesion. Frequently there is a duodenitis and occasionally an ulcer, often a deforming periduodenitis, which is an actual adhesive extension of inflammation from the diseased gall bladder. This process is to be expected since the duodenum is in such close relation with the gall bladder.

Billings⁹ was the first, I believe, to call attention to the peculiar anatomical susceptibility of the gall bladder to blood borne infections. There are terminal capillaries in the fundus of the gall bladder where organisms in the blood stream are apt to find lodgment and where an inflammatory process can easily block off the local circulation. The presence of such terminal capillaries makes the heart valves prone to infection. This is undoubtedly an important predisposing cause to cholecystic disease.

Rosenow¹⁰ has demonstrated that certain strains of streptococci have an elective affinity for the gall bladder wall. "In animals injected with strains of gall bladder streptococci seventy nine per cent developed lesions of the gall bladder." He thinks that cholecystitis is a blood borne infection from a local focus. He has also shown that strains of streptococci which have acquired an affinity for the gall bladder have a coincident affinity for the myocardium. It has been frequently noted

by clinicians that patients who suffer from cholecystic disease often have myocardial disease.

It is very doubtful indeed if any organism finds its way to the gall bladder along the common and cystic ducts.

The result of infection of the gall bladder with streptococci of low virulence is the production of a catarrh with its usual manifestations; oedema, congestion of the mucous membrane, increased production of mucus, and the desquamation of epithelium.

In the chronic catarrhal gall bladder, the external appearance may not suggest disease, except that the lymphatic gland near the cystic duct is enlarged. The mucous membrane may have a normal velvety appearance though the bile may be viscid and calculi may be present.

If the inflammatory process is more severe, the mucous membrane may show yellow specks resembling strawberry seeds, the strawberry gall bladder of MacCarty. When the inflammatory process has been long continued, the gall bladder is found more or less atrophied, and especially in spots probably due to ulceration. It may be small and shriveled due to widespread sclerosis, and there may be no vestige of mucosa remaining. Externally there may be a mass of adhesions binding together the adjacent tissue, especially the liver, the stomach, and the duodenum. A deforming periduodenitis may result.

The formation of gall stones seems to be incidental to catarrhal inflammation, though over concentration of cholesterol in the bile, is an important factor; it is very probable that stone formation does not occur except in the presence of the products of bacterial inflammation.

Aschoff,¹¹ "Has shown that pure cholesterol stones may form under aseptic conditions in the absence of any sign of cholecystitis," but *Rosenow*,¹⁰ "Has found that infection is, none the less, generally present."

The bile salts have an important function in keeping in solution the cholesterol. The cholesterol is a product derived from the breaking of red blood cells and nervous tissue.

Boyd says: "That the cholesterol is derived also from the corpus luteum and the cortex of the suprarenal glands." This may, in a way, offer an explanation for women being more prone to gall stones than men, and may explain why gall stones so frequently occur after pregnancy.

The most important source of cholesterol in food is the yolk of eggs.

*McDowell*⁸ says that bacteria and their products may precipitate out of solution the cholesterol; anyhow, it seems not to occur except in the presence of bacterial infection.

The bacteria and desquamated epithelium probably act as starting points for crystallization or precipitation. Both have been frequently found to be the nucleus of stones which have been studied morphologically.

*William Boyd*¹² says: "When a specimen of bile is inoculated in vitro with a culture of bacillus coli precipitation of the cholesterol and bile salts occurs."

Predisposing factors tending to produce stagnation of bile are well known—tight lacing—the sedentary life—and the typical cholecystic patient, the woman who is fat, fair and forty. However as these things contribute, it may be toward bacterial infection rather than the precipitation of cholesterol.

A large proportion of the patients who have cholecystic disease are chronic invalids, they may not be very sick, but they are never well, and they often present a difficult diagnostic problem.

In the clinical study of these patients a carefully taken history is of the greatest importance, a diagnosis usually can not be made by gastric analysis; by the study of duodenal contents; by x-ray study of the stomach and gall bladder, or by any other means to the exclusion of a carefully taken history. One should have a clear and definite historical background, and should know the character of distress; its periodicity; its relief; its seasonal variance; its repetition; and its nocturnal features.

The other methods of clinical study should then be employed; a gastric analysis, preferably by the Rehfus method; an x-ray study of the gastro-intestinal tract; and a

study of the gall bladder by the Graham method.

The pylorospasm and hyperperistalsis which is characteristic of cholecystic disease is usually due directly to an associated peri-duodenitis.

Von Rohde found radiographically the bulb deformed in thirty of thirty-seven cases of gall bladder disease.

Duval says: "The radiographic deformity of the bulb is rarely absent in the cases of cholecystitis which he has examined."

The outstanding feature, clinically, of the indigestion associated with cholecystic disease is its irregularity. The ulcer syndrome is complete and clear cut, the symptoms are definite, and there is regularity in their occurrence. Distress does not occur when the stomach is filled with food, but it comes at a definite time after taking food, and there is the same sort of distress every day, with food and soda relief. There is seasonal variance, there are periods of freedom from gastric distress lasting for weeks or months, when the patient can take any sort of food without causing discomfort. The indigestion of cholecystitis is irregular, it comes and goes, the patients say they have it off and on, there is no exact repetition of symptoms or daily repetition; there is no definite seasonal variance; there are no definite periods of freedom from gastric distress. Often the pain is quite the same in character as that of ulcer and it may come on immediately after meals or an hour later and there is often soda relief but there is not so often food relief. The gall bladder distress is often prominently nocturnal in character, frequently patients go through the day with very little distress to have their rest broken after midnight by gastric pain, fullness, and gaseous eructation.

While the pain in gall bladder disease is often in the epigastrium and not in the right hypochondrium it has a peculiar tendency to go through to the back, and this does not occur in ulcer, unless, as seldom happens, the ulcer is situated posteriorly.

Moynihan proposes as typical of cholecystic disease: "A complaint of fullness, weight of distension, or oppression in the epigas-

trium coming on one half to three quarters of an hour after meals, relieved by vomiting, and elicited with remarkable constancy by greasy foods."

Nausea is not a prominent feature of ulcer and occurs only when there is narrowing of a pyloric orifice or when a partial stenosis exists.

Another important feature of cholecystic disease is that it is not often relieved by ulcer treatment, and if at all only temporarily, and it is not made worse, as ulcer is, by rough food. The character of food does not seem to matter so much in gall bladder disease except that fried and greasy foods are not well tolerated. The ulcer patient usually knows what foods disagree while the gall bladder patient often does not.

One clinician has characterized the outstanding features of gall bladder disease as gastric malaise and nausea.

A proper evaluation of the symptoms is of the greatest importance in the differential diagnosis between cholecystic disease and ulcer.

I am not saying much about the indigestion of reflex origin due to constipation, appendicitis, pelvic disease, etc., as they are not so difficult to differentiate when modern clinical methods are employed. Constipation is a very frequent cause of painful indigestion and appendix disease may cause it.

The only thing that will support a diagnosis of chronic appendicitis as a cause of reflex painful indigestion, in many instances, is the fact, that the removal of an apparently normal appendix will in some unaccountable way relieve symptoms for a time in some cases.

There is still much confusion in the differential diagnosis of diseases of the upper abdomen and there is undoubtedly much still to be learned, but for a great deal of the confusion there is no reason. *Berkman* says: "If our diagnostic vocabulary could only be purged of such terms as, adhesions, dropped stomach, intestinal stasis, auto-intoxication, and catarrh of the stomach, the handling of patients with chronic dyspepsia might be less perplexing." I feel that chronic

appendicitis might well be added to this list.

Much has been written about the Lyon method of duodenal lavage, and duodenal aspiration for purposes of diagnosis. Friedenwald and Morrison who have had quite some experience with the method seem to think it has a certain value in diagnosis. The method was tried out pretty thoroughly at the Mayo Clinic and abandoned.

The hyperacidity which occurs in cholecystitis can be demonstrated by the Ewald method of gastric analysis, but with the Rehfuess method curves may be obtained that are typical of gastric ulcer, duodenal ulcer, and gastric cancer and help in the elimination of these conditions.

The x-ray study of the gastro-intestinal tract with an opaque emulsion is of the greatest importance in the diagnosis of cholecystic disease, and by this means, usually, the several gastric conditions which simulate it can be eliminated.

Carman says that: "Ninety-five per cent of all six hour residue in the stomach indicates a lesion in the stomach or just beyond it." Cholecystitis with its duodenal involvement will produce such a residue and in the absence of x-ray evidence of cancer or ulcer its presence points to a diseased gall bladder.

In the more chronic cases of cholecystitis, or where there is some intercurrent debilitating disease, there may be a hypoacidity or an achylia.

Pylorospasm may be due to appendicitis or some other lesion of the intestine, but such pylorospasm is not resistant to belladonna.

The important x-ray findings in gall bladder disease with the opaque meal are: pylorospasm resistant to belladonna; six hour residue; fixation of the pyloric end of the stomach; gastric hyperperistalsis; localization of tender point over the gall bladder area; demonstrating the absence of cancer, ulcer, and other lesions of the stomach and duodenum.

The dye method of gall bladder study as devised by Graham offers a means of visualizing the normal gall bladder. By this method it is possible to obtain positive evidence of cholecystic disease in a large proportion of cases.

Kirklin says that: "At the Mayo Clinic cholecystography has been accurate in cholecystic disease with stone in 98.4 percent."

The most frequent and reliable sign of gall bladder disease by this method is failure of the gall bladder to cast a shadow. Often with stone or papilloma there is mottling.

The final diagnosis of gall bladder disease must rest upon a correlation of all the evidence obtainable.

The treatment of cholecystic disease is surgical and the operation of choice is cholecystectomy.

Judd says: "Of course one does not wish to remove a gall bladder if the pathologic change is not sufficient to make the disease grossly apparent, nevertheless, if the clinical features are clear cut, removal of the gall bladder, after the exclusion of all other possibilities, offers a good prospect of relieving symptoms. If the gall bladder is not removed in these clinically definite cases, the symptoms will continue."

In cholecystitis there is, surely, in most cases, an active bacterial inflammatory process in the gall bladder wall, and it appears that it is quite as illogical to drain such a gall bladder as it would be to drain an appendix under the same circumstances. And it has not been so long since it was the practice to drain the appendix. It seems that leaving such diseased tissue in the abdomen is extremely bad practice as it is a bacterial focus from which organisms can be more or less constantly thrown into the circulating blood stream, and from which a cholangitis or a myocarditis may result, or be made worse if it already exists.

Myocarditis which often occurs in cholecystic disease in some instances may offer an obstacle to surgical intervention.

Rolleston says: "The myocardial weakness due to the toxemia of gall bladder origin may be a serious factor as regards operation, for on the one hand it increases the danger of operation, and on the other hand the cardiac insufficiency will continue until the infective focus is removed or its virulence greatly diminished."

Another good reason for removing the gall bladder is the possibility of cancer being engrafted on the cholecystitis, as mentioned by McCallum.

Osler says: "Of 3908 operations on the gall bladder and bile passages, cancer was found in 85 cases, or 2.1%."

Bassler says: "That cancer of the gall bladder and biliary ducts usually follows cholecystitis and cholelithiasis."

Much has been written in the past few years about the nonsurgical drainage of the bile passages as suggested by Meltzer of the Rockefeller Institute, and carried out by Lyons, but its usefulness has not been established.

Friedenwald and Morrison says "Duodenal lavage is an extremely valuable aid in the treatment of catarrhal jaundice," and it may be a method of some usefulness in this condition in certain cases in which surgery is contraindicated.

Berkman says of this method of treatment: "The profession as well as the public is growing weary of efforts to drain the gall bladder by applying some simple household remedy to the duodenum by awe-inspiring and complicated means. To the patient the procedure is uncomfortable, expensive and ineffective."

In the surgical treatment of gall bladder disease it is of the greatest importance to remove the focus of infection.

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OTITIS MEDIA*

Ionization or Electro-Medication in the Treatment of Chronic Purulent Cases

A. G. FORT, M. D.

Atlanta

Of all the diseases of the Middle ear, otitis media purulent chronic has been the most distasteful, so far as treatment is concerned. For this reason, I fear we have not persisted as we should in giving these sufferers relief. The large numbers appearing at clinics and at our offices, seeking any kind of help, proves that our present methods are not satisfactory. It is for this reason I am bringing to the attention of my colleagues the use of electricity in aiding in the application of drugs to the affected parts.

We recognize the following methods of

TREATMENT:

1. Ariation or drainage.
2. Suction.
3. Antiseptics.
4. Astringents.
5. Heat.
6. Ultra-Violet rays.
7. Vaccines.
8. Ionization.
9. Surgery.

In the fact that we have so many methods again demonstrates that we are far from agreement on what to do. That there is a place for each method is not denied, and that we secure uniform good results by any or all methods is not admitted. We do not claim that surgery, and particularly the radical mastoid operation, is not indicated in many cases but we do hold that in view of the unsatisfactory results, as to hearing and preventing chronic discharge, that any method which will obviate the necessity of this dangerous procedure is valuable.

What is Ionization? It is taking advantage of the chemical positive and negative compounds containing electro positive and negative ions and using the electric current to drive medicines into infected tissue. We are

*Read before the Sixth District Medical Society, Indian Springs, Georgia, July 11, 1928.

familiar with the term valence in chemistry and the effects of running through water an electric current, thereby, separating it into its elements, nitrogen and oxygen. It is on this phenomena we use compounds in treatment of infected areas.

The substance now being used in the treatment of otitis media purulent chronic is Zinc Sulph, $ZnSO_4$. Zn has a valence of 2 and is electro-positive. Therefore, we place our solution, usually 2 gr. to the ounce of water, in the affected ear and attach a Zinc electrode to the positive pole. This is placed in the solution in the ear, protecting the ear by means of a non-conductor as glass or rubber.

The fact we use a zinc electrode keeps the solution charged with zinc. The negative pole is attached to any part of the body and should come in contact through a large pad of gauze or cotton wet with salt solution, then a direct current passed through the solution in the ear. This current is secured either from a generator or an ordinary dry cell battery. From 2 to 4 Ma. of current is allowed to pass through for from 15 to 20 minutes. There is a stinging sensation, both in the ear and at the negative pole. The Zn ions are driven from the positive pole and are pulled toward the negative pole. Thus, our Zn penetrates the tissues more deeply than when simply applied in solution. On the nature of the pathology, largely depends results obtained.

Tympanic sepsis alone gives way to this treatment in a wonderful way. Many times one treatment will completely dry up the cavity and rapid restoration of the drum follows. It is true that this condition may be relieved by "drops" but why use them over a period of time when one treatment will suffice? Tympanic infection with polypi or granulations are often cured provided the polypi are first removed and then treatment applied.

Tympanic infection with caries are benefited but before cure the destroyed bone should be removed.

Tympanic sepsis associated with simple infection of the eustachian tube is greatly benefited and the tube condition often cured.

Tympanic sepsis, plus furunculosis of the

external auditory canal, is benefited and this is an ideal type for Zn ionization.

Tympanic sepsis, associated with chronic mastoiditis where cholesteatoma is present, is benefited but not cured. However, after your mastoid is opened and your areas of cholesteatoma removed it is claimed your chances of success in securing a dry ear are increased by treatment.

Where there is associated infected sources as tonsils, adenoids, and sinuses, these conditions should be removed before treatment is applied.

SUCCESSFUL VACCINE PROPHYLAXIS AND TREATMENT OF WHOOPING COUGH

(Continued from Page 485)

Some of the children mentioned as having had prophylactic treatment have subsequently, after an interval of a year or more, had the disease in mild form, therefore the immunity must be only temporary, lasting at most not over 12 months.

The prophylactic doses given were the same as outlined in the table for therapeutic dosage. A maximum of four doses was given. In children under two years of age the dose is cut about one-third. A mixed vaccine containing 5,400 million organisms per c.c. was used. (Serobacterin.)

Conclusions:

1. That whooping cough vaccine is an effective agent in the treatment of whooping cough and even more effective as a prophylactic agent.

2. That it must be given in large doses to secure maximum results.

3. That a few large doses are far more effective than many small ones.

4. That large doses are comparatively safe, no bad results having occurred in this series.

5. That complications are thereby practically eliminated, none having occurred in this series.

6. That whooping cough can be and should be avoided or prevented especially in very young children.

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 201 Exchange Bldg.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

NOVEMBER, 1928

ALLEN H. BUNCE, M.D., Editor

H. L. ROWE, Business Manager

Publication Committee

E. C. THRASH, M.D., Chairman

A. S. M. COLEMAN, M.D.

M. M. HEAD, M.D.

Articles are accepted for publication on condition that they are contributed solely to this Journal.

Manuscripts should be typewritten, double-spaced, and the original (not the carbon copy) submitted. Used manuscript is not returned unless requested.

Communications and items of general interest to the profession are invited from all parts of the State. We especially invite county society secretaries to send us information of happenings in the county that would be of interest to the members throughout the State.

Reprints should be ordered within 30 days after the appearance of an article, since all type will be destroyed at the end of that time.

Editorial Department**GEORGIA STATE NURSES' ASSOCIATION COOPERATES WITH MEDICAL ASSOCIATION OF GEORGIA***Hospital Association for Georgia*

At the meeting of the Georgia State Nurses' Association in Columbus, November 8-10, a series of resolutions were passed pledging cooperation with the Medical Association of Georgia. The first of these, in reference to the formation of a hospital association, is the outgrowth of the address of Miss Jane VandeVrede, Executive Secretary of the Nurses' Association, before the Savannah meeting of the House of Delegates of the Medical Association of Georgia in May of this year. Following her address a resolution was passed increasing the membership of our Hospital Committee to five and directing it to take the initiative in forming a hospital association for Georgia. The text of the Nurses' resolution is as follows:

Whereas, the Medical Association of Georgia has enlarged the scope of its Hospital Committee to include cooperation with the Georgia State Nurses' Association

toward the formation of a Hospital Association and a study of the important needs of nursing service and its distribution, especially in the rural districts.

BE IT RESOLVED, That this Association heartily endorse such action and pledge cooperation and support to such effort.

BE IT FURTHER RESOLVED, That the Advisory Committee of this Association be authorized to meet with the Hospital Committee of the Medical Association of Georgia upon the call of that Committee to further these plans.

Over-Supply and Unequal Distribution of Nurses

The following resolution furnishes food for thought and action by all organizations interested in the adequate care of the sick:

WHEREAS, in the State of Georgia there are 56 schools of nursing, thirty of which are connected with hospitals with a daily average of less than thirty patients, and less than fifty beds, which is the minimum advocated by the American Medical Association, and

WHEREAS, Georgia furnishes a serious situation where, because of economic conditions, two-fifths of the nurses already graduated reside with one-fourth of the population of the State in 16 of our largest towns, and

WHEREAS, there is now a serious unemployment among graduate nurses, and the greatest number of student nurses in all of our schools who will be graduated within the next three years.

BE IT RESOLVED, That this organization exert every effort possible to secure the understanding and support of the Medical Association and business organizations to

- (1) Increase the number of community hospitals with county and city financial support;
- (2) Decrease the number of schools of nursing and increase the use of nurses already partially or fully trained;
- (3) Increase the use of special nurses for two and three patients instead of one, in institutions, for people of moderate means;
- (4) Organize local registries sponsored by joint personnel representing medicine, nursing and the public, and to provide subsidies to introduce hourly and group nursing in communities wherever such support can be secured.

Organized medicine has long advocated the care of the sick of every community in the community itself. As Dr. Frank Billings has so often said, the great work of organized medicine today is to provide the benefits of present medical knowledge for every patient, even in the most remote sections of the country. This can be accomplished by the community support. The size of the hospital must be determined by the population of the area it is to be called upon to serve. It should

be open to all reputable physicians in its territory for their private patients. In addition it would serve as a place for the adequate care of the part-pay and charity patients of the community. An out-patient department could take care of all ambulatory charity patients.

At present, in many Georgia communities, the physicians are expected to provide hospital facilities for both charity and pay patients in addition to rendering a very large percentage of their services free. Furthermore, every physician is expected to look after his ambulatory charity patients in his office. There is no more reason for expecting physicians to provide hospital facilities for communities than there is for requiring lawyers to furnish the court houses for the trial of all civil suits. The physicians of every community gladly do all charity work required. Since this is true, may they not reasonably expect the community itself to furnish the place and facilities for doing this work? Of course, many of the members of our Association own and operate private hospitals but in the great majority of instances they do so at a financial loss insofar as the hospitals are concerned, and they continue to do so only because they find it necessary in order to carry on their work in a proper and scientific manner. Adequately supported community hospitals would do much to solve the problems presented in the above resolution.

Nurses for the Tuberculous

The following resolution by the Nurses' Association indicates an advanced and bold step in reference to the proper care of an important class of patients. At present student nurses receive no practical training in the care of the tuberculous for the very simple reason that general hospitals refuse admission to patients whom they know to be suffering from tuberculosis. Yet they care for many patients suffering from contagious and infectious diseases much more easily transmitted than tuberculosis. Georgia can never adequately care for all her tuberculous at Alto. There is no reason why every general hospital should not have a department for the care of the tuberculous both for the service it will render to those sufferers and for the proper training of its nurses.

WHEREAS hospital facilities or sanatoria have not been generally provided for the tuberculous, and

WHEREAS nurses have not received the usual instruction nor experience in this widely distributed and prevalent condition,

BE IT RESOLVED, That this Association heartily endorse the movement to provide tuberculosis wards in our general hospitals, and the attendant experience and instruction to our student nurses.

BE IT RESOLVED FURTHER, That this Association heartily endorse the plan of the State Board of Health and the State Sanatorium to secure an appropriation for a nurses' home for that institution, and pledge its support to that end. And

BE IT FURTHER RESOLVED, That this Association commend and endorse the plan of the State Sanatorium to provide undergraduate and post graduate courses for nurses to better prepare them to meet the needs of tuberculous patients for skilled nursing care.

THE STATE'S SACRED DUTY

The splendid work that is being done at the Georgia Training School for Mental Defectives at Gracewood, under the able superintendency of Dr. J. W. Oden, has called for an extended editorial of endorsement from the Augusta Chronicle. In this it says:

"The fact that Dr. Oden has, within approximately two years, increased the number of children from 54 to 140, or almost 300 per cent, and hopes to increase the number to 175 within the year with the same maintenance appropriation, and the further fact that these children show evidences of kind and considerate treatment, are neat and well fed and are taught everything that their little minds will allow them to receive, is one of the most remarkable stories in the history of any state's eleemosynary institutions."

Beginning with this year the state is appropriating \$65,000 a year for maintenance. From this sum, by cautious economy, and by the use of the farm and dairy, in which the boys work, both as a means of subsistence and as a method of practical vocational training, Dr. Oden has been enabled to make some necessary improvements, such as the installation of a 25,000 gallon water tank, an ice plant, and the enlargement of the main building, providing room for 50 additional boys, and other expansions and renovations.

Says the Chronicle further:

"The tender solicitude that Dr. Oden has

(Continued on Page 532)

District and County Societies

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1928 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 20, 1927.
2. Turner County, Dr. J. H. Baxter, Ashburn, November 15, 1927.
3. Terrell County, Dr. Logan Thomas, Dawson, December 1, 1927.
4. Pike County, Dr. M. M. Head, Zebulon, December 3, 1927.
5. Ben Hill County, Dr. L. S. Osborne, Fitzgerald, December 8, 1927.
6. Evans County, Dr. S. T. Ellis, Claxton, December 20, 1927.
7. Taylor County, Dr. J. C. Hind, Reynolds, January 3, 1928.
8. Jasper County, Dr. E. M. Lancaster, Shady Dale, January 6, 1928.
9. Talbot County, Dr. C. C. Carson, Talbotton, January 28, 1928.
10. Wayne County, Dr. M. N. Stow, Jesup, February 9, 1928.
11. Elbert County, Dr. B. B. Maddox, Elberton, March 1, 1928.
12. Lamar County, Dr. Jno. M. Anderson, Barnesville, March 6, 1928.
13. Terrell County, Dr. Logan Thomas, Dawson, March 7, 1928.
14. Stephens County, Dr. C. L. Ayers, Toccoa, March 8, 1928.
15. Upson County, R. L. Carter, Thomaston, March 15, 1928.

16. Crisp County, Dr. J. N. Dorminy, Cordele, April 5, 1928.
17. Henry County, Dr. H. C. Ellis, McDonough, April 10, 1928.
18. Dougherty County, I. M. Lucas, Albany, June 6, 1928.
19. Dooly County, Dr. F. E. Williams, Vienna, June 29, 1928.
20. Macon County, Dr. C. P. Savage, Montezuma, June 29, 1928.
21. Stewart-Webster Counties, Dr. J. M. Kenyon, Richland, June 29, 1928.
22. Sumter County, Dr. Henry R. Smith, Americus, June 29, 1928.
23. Emanuel County, Dr. R. C. Franklin, Swainsboro, July 3, 1928.
24. Rabun County, Dr. J. A. Greer, Clayton, September 18, 1928.
25. Forsyth County, Dr. Marcus Mashburn, Cumming, October 27, 1928.

DISTRICT HONOR ROLL

1. Third District, Dr. G. Y. Moore, Councilor, Cuthbert, June 1, 1928.

1929 HONOR ROLL

1. Randolph Conty, Dr. G. Y. Moore, Cthbert, September 6, 1928.
2. Stewart-Webster Counties, Dr. J. M. Kenyon, Richland, November 12, 1928.

NEW MEMBERS FOR 1928

Currie, M. L., Vidalia.
 Snow, Harmon, Experiment.
 Soper, R. W., Augusta.
 Walker, Lewis M., Augusta.

THE SEVENTH DISTRICT MEDICAL SOCIETY.

Rome, Ga., Sept. 26, 1928.

The Seventh District Medical Society of Georgia met at the Coosa Country Club in Rome on Wednesday, September 26th, the guests of Dr. J. Turner McCall and the Floyd County Medical Society. Drs. R. M. Harbin and C. V. Wood acted as president and vice-president, respectively and Dr. M. M. McCord, secretary.

Dr. J. Turner McCall was the host of the occasion, assisted by the local profession. The program was very unique in that all of the papers were read by guests from Atlanta, also Dr. McCall invited all of his class of 1904, Medical Department, Emory University, to be his guests. There were thirteen members of the class present, which was a very fine showing after one quarter of a century, especially when it is realized that the members of the class of 1904 are scattered all over the South. An excellent barbecue and Brunswick stew with all that goes with it, was served to the full enjoyment of all present.

Dr. Tanner Lowry of Cartersville, a member of the class of 1904, introduced a resolution of thanks and appreciation to his classman, Dr. McCall, for the hospitality manifested to all present.

Dr. Spearman of Chickamauga extended an invitation for the society to be the guests of Walker County Society next April in LaFayette. The invitation was seconded by Dr. J. H. Hammond of LaFayette, and the same was unanimously accepted by the society.

A telegram was received from Dr. C. K. Sharp of Arlington, President of the Medical Association of Georgia, expressing his regrets at not being able to attend on account of illness of himself. The society sent him a message of cheer and greetings.

The program was taken up as follows:

Invocation—Rev. H. F. Joyner.

Committee on necrology asked for further time on their report.

Dr. B. V. Elmore, chairman of the Committee on Public Health and Legislation, reported that a new policy had been adopted of having a film thrown on the screen of a local theater at every meeting of the district society touching some phase of public health. He announced that the first film would be shown at the Rivoli Theater between the regular films all day of the 26th on the making

of dry milk. All physicians were invited to be the guests of the Rivoli at any hour during the day and see the picture, in addition to the public generally. The film was furnished by The Dry Milk Company of New York, and was much enjoyed by all who saw it.

Papers entitled as follows were read:

1. Brief remarks on the work at Alto Sanatorium—Edson W. Glidden, Alto. Discussed by Drs. Paullin, Shamblin, Bowdoin and Abercrombie.

2. Asthma in Children. Hal McCluney Davison, Atlanta. Discussed by Drs. Shamblin, Maddox, McCord, Adair and Wood.

3. Sterility in Women (illustrated with lantern slides)—W. F. Shallenberger, Atlanta. Discussed by Drs. Starr and Gober.

4. The Present Status of the Diagnosis and Treatment of Nephritis—Allen H. Bunce, Atlanta. Discussed by Drs. Davison and Paullin.

5. Concerning the Treatment of Recent Injuries to the Eye and Adnexa—F. Phinizy Calhoun, Atlanta. Discussed by Drs. Ault and Cox.

6. Cervical Lymph Nodes (illustrated with lantern slides)—Dan C. Elkin, Atlanta. Discussed by Drs. Shaw and R. M. Harbin.

7. Physiological Facts and Clinical Observations Concerning the Pulse.—James E. Paullin, Atlanta. Discussed by Dr. Shaw.

8. Celiac Disease—W. L. Funkhouser, Atlanta. Discussed by Drs. Maddox and McCord.

NEWS ITEMS

The Second District Medical Society met at Camilla on October 12th. The members were entertained at luncheon by the Mitchell County Medical Society. The following doctors were on the program: Thomas Chason, Donalsonville; A. S. Bacon, Albany; C. C. Harrold, Macon; C. K. Wall, Thomasville; J. Calvin Weaver, Atlanta; C. K. Sharp, Arlington, president of the association.

Dr. M. K. Bailey announces the opening of his office at 502 Medical Arts Building, Atlanta. Practice limited to urology.

The Bulloch-Candler Counties Medical Society and the Woman's Auxiliary met at Lake View Country club on October 17.

Dr. W. C. Hays, Colquitt, entertained the members of the Tri-Counties Medical Society at dinner at the Harrell hotel on October 10th. The business meeting of the society was held at the offices of Dr. Hays.

The Thomas County Medical Society met at Coolidge on October 30th.

Woman's Auxiliary Medical Association of Georgia

OFFICERS

| | | | |
|-----------------------|--------------------------------|---------------------|----------------------------------|
| President | Mrs. C. C. Hinton, Macon | 3rd Vice-Pres. | Mrs. A. J. Mooney, Statesboro |
| Pres.-Elect | Mrs. Marion T. Benson, Atlanta | Cor. Sec. | Mrs. J. A. Selden, Macon |
| 1st Vice-Pres. | Mrs. Wm. R. Dancy, Savannah | Rec. Sec. | Mrs. Ralston Lattimore, Savannah |
| 2nd Vice-Pres. | Mrs. W. F. Reavis, Waycross | Treasurer | Mrs. M. B. Allen, Hoschton |
| Parliamentarian | Mrs. J. Cox Wall, Eastman | | |

Delegates to A. M. A.

| | | | |
|--------------------------|---------|----------------------------|--------|
| Mrs. C. W. Roberts | Atlanta | Mrs. H. M. Fullilove | Athens |
|--------------------------|---------|----------------------------|--------|

DELEGATES TO THE A. M. A.

| | | | |
|--------------------------|---------|---------------------------|---------|
| Mrs. C. W. Roberts | Atlanta | Mrs. Geo. W. Fuller | Atlanta |
| Mrs. Dan Y. Sage | Atlanta | Mrs. J. Cox Wall | Eastman |

PROGRAM OF ENTERTAINMENT

*Interstate Post Graduate Medical Association
of North America.*

Atlanta, Georgia, October 14-20

When three thousand of the most noted physicians and surgeons from half a dozen different countries are gathered together in one city, as was the case in Atlanta, during the recent Interstate Post Graduate Medical Assembly of North America, it goes without saying that the proceedings and social affairs incident to the occasion are of special interest in medical circles.

For years Georgia and Fulton County organizations have worked to bring the Assembly here as it numbers among its members, men famous the world over, including the most important physicians of America and Europe.

Hardly less interesting than the advance of their beloved Science, is the opportunity for advancing friendly contacts afforded by the social phases of the annual assemblies. With more than three thousand doctors registered and five hundred of them accompanied by their wives, the occasion was marked by a series of brilliant entertainments.

Mrs. L. G. Hardman, the gracious and charming wife of Georgia's chief executive, himself a distinguished member of the medical profession, was honorary chairman of the entertainment committee for women.

Mrs. James N. Brawner, president of the Woman's Auxiliary to the Fulton County

Medical Society, served as general chairman of entertainment. She was ably assisted by Mrs. Allen H. Bunce, the president of the corresponding Auxiliary of the American Medical Association, and Mrs. W. A. Selman, the president-elect of the Fulton County Auxiliary, as vice-chairman.

On the honorary executive committee were the following ladies: Mesdames Floyd W. McRae, Sr., Phinizy Calhoun, Dunbar Roy, L. C. Fischer, W. C. Warren, Sr., G. Pope Huguley, T. T. Ballenger, Geo. H. Noble, Sr., Stephen Barnett, C. E. Boynton, L. M. Gaines, H. L. Wright, J. L. Campbell, Theodore Toepel, B. H. Wagnon, Bernard Wolff and L. Sage Hardin.

The executive committee was composed of the following:

Mesdames E. C. Davis, M. T. Benson, George Niles, William H. Hailey, L. G. Baggett, J. A. McGarity, J. J. Clark, M. T. Edgerton, G. F. Klugh, Calhoun McDougall, O. H. Matthews, J. R. Childs, Wm. E. Campbell, Jr., Francis Jones, Chas. E. Waits, E. C. Thrash, J. T. Floyd, C. A. Rhodes, C. W. Roberts, F. C. Nesbit, Omar Elder, George Fuller, E. A. Allen, Frank Boland, Dan Y. Sage, Clinton Reed, Forest M. Barfield.

Registration was in charge of Mrs. Allen H. Bunce, who had as her vice-chairman, Mrs. M. T. Edgerton and Mrs. George M. Niles. The official report of this committee gave a total of 477 registrations for women, 314 being visiting women and 163 local.

All the publicity incident to the convention was handled by Mrs. Omar Elder, chairman of publicity.

Mrs. L. G. Baggett was chairman of in-

formation committee, Mrs. Marion Pruitt, Mrs. Wm. H. Hailey, Mrs. O. F. Cofer, Mrs. J. W. Landham were the vice-chairmen.

The entertainment committee was headed by Mrs. Wm. E. Campbell, Jr., the vice-chairmen being Mrs. J. W. Roberts and Mrs. Glenville Giddings, Jr. The telephone committee was headed by Mrs. E. A. Allen, assisted by Mrs. R. R. Daly.

The decorations for the various entertainments were supervised by a committee, of which Mrs. George Fuller was chairman, Mrs. J. A. McGarity and Mrs. W. W. Anderson were vice-chairmen.

The automobile committee, which was of the utmost importance, contributed greatly to the pleasure of the guests. Mrs. O. H. Matthews was the capable chairman and Mrs. Clinton Reed and Mrs. Francis Jones were the vice-chairmen.

Mrs. Calhoun McDougall was chairman of the courtesy committee, with Mrs. Forrest M. Barfield and Mrs. C. E. Ware serving as vice-chairmen. Mrs. Charles Dowman and Mrs. Cyrus Strickler provided courtesies at the various city clubs and arranged matches for the golfers among the visiting women.

Program of Entertainment

The program of entertainment for the women guests to the Interstate Post Graduate Assembly included a varied and interesting round of sight-seeing tours, teas, luncheons, banquets, recitals, receptions and an old-fashioned Georgia barbecue.

Sunday evening, October 14, a brilliant concert was given in the ball room of the Biltmore Hotel, at which time the visitors were given an opportunity of hearing some of the South's most gifted artists. Of special note were the soloists of the occasion, Miss Margaret Hecker and Dr. E. L. Bishop, and the ensemble numbers of the Leide String Quintette and of the Emory Glee Club. Mrs. Frank Boland and Mrs. Chas. E. Waits arranged the program for this event.

Through the special courtesy of the Davison-Paxon Company, of Atlanta, a fashion show was given on Monday afternoon, October 15, in the tea room of the new store of the Davison-Paxon Company for the women visitors to the convention. The fashion presentations were supplemented by dancers from the Potter-Spiker School of Dancing, under the supervision of Mrs. Potter-Spiker. Music was under the direction of Enrico Leide and his orchestra. Mrs. Wm. E. Campbell, Jr., and the entertainment committee were in charge of the program.

Following the ride about the city on Tuesday afternoon, October 16, and the visit to the Cyclorama at Grant Park, the visitors were entertained at a delightful tea at the executive mansion. This event being one of the most brilliant of the week's entertainments.

Governor and Mrs. Hardman were assisted in receiving by Mrs. Jas. N. Brawner, Mrs. Allen Bunce, Mrs. Floyd McRae, Sr., Mrs. I. N. Ragsdale, the wife of the Mayor of Atlanta, Mrs. W. A. Selman, Mrs. M. T. Benson, Mrs. C. W. Roberts, Mrs. Frank Boland, Mrs. Chas. Waits and Mrs. E. C. Davis.

On Wednesday evening, October 17, at 8:30 o'clock, Mrs. Potter-Spiker presented a large class of dancers in a beautiful recital in the ball room of the Biltmore Hotel.

The most outstanding and brilliant event of the week's affairs was the president's reception and dance on Wednesday evening, following the dance recital.

The ball room was elaborately decorated with palms and smilax.

Receiving with the president, Dr. L. F. Barker, of Baltimore were Dr. and Mrs. Marion T. Benson, Dr. C. K. Sharp, president of the Medical Association of Georgia; Governor and Mrs. L. G. Hardman, Dr. John B. Deaver, of Philadelphia; Dr. Chas. Mayo, of Rochester, Minn.; Dr. William Peck, of Freeport, Ill.; Dr. J. Shelton Horsley, Dr. George W. Crile, of Cleveland Ohio; Dr. Edwin Henes, Jr., Milwaukee; Mayor and Mrs. I. N. Ragsdale, Dr. and Mrs. James N. Brawner, Dr. and Mrs. Allen H. Bunce, Dr. and Mrs. Pope Huguley, Dr. Wm. T. Haggard and many of the foreign doctors present.

The grand march and dance which followed the reception was led by Dr. and Mrs. Wm. R. Dancy, of Savannah.

On Thursday morning, October 18, the visitors were taken for a ride to Stone Mountain and to other places of interest about the city. Automobiles and busses left the Biltmore Hotel at 10 o'clock, Mrs. O. H. Matthews and the automobile committee in charge.

One of the most outstanding events of the week was the banquet on Friday evening at the Biltmore Hotel, honoring the visiting doctors and their wives.

The ball room was beautifully decorated with palms and smilax and each table held as a centerpiece a basket of pink roses and dahlias. The decorations were supervised by Mrs. Geo. Fuller and the decorating committee.

Dr. Marion T. Benson, general chairman of local committees for the convention, was toast master on this occasion. Among the noted speakers on the program were Dr. L. G. Hardman, Governor of Georgia; Hon. I. N. Ragsdale, Mayor of Atlanta; Dr. L. F. Barker, professor emeritus of Medicine at Johns Hopkins and President of the Interstate Assembly; Dr. Chas. Mayo, of Rochester, Minn.; Dr. William D. Haggard, of the Vanderbilt University School of Medicine.

Among others introduced on this occasion were Mrs. Jas. N. Brawner, president of the Woman's Auxiliary to the Fulton County Medical Society, Mrs. Allen H. Bunce, president of the Woman's Auxiliary to the American Medical Association, Dr. William B. Peck, of Freeport, Ill., Dr. Edwin Henes, Jr., of Milwaukee, Dr. Henry G. Langworthy, of Dubuque, Iowa and Dr. G. V. I. Brown, of Milwaukee.

Among the foreign guests present on this memorable occasion were Dr. Jas. E. McDonagh, Dr. Percy Hughes, Dr. and Mrs. Justin M. Waugh, Dr. and Mrs. D. C. Leyton, Dr. S. T. Burrell, Dr. Thomas P. Dunhill, Dr. Farquhar Buzzard, of England; Dr. and Mrs. Daniel J. Cranwell, of Buenos Aires, Argentina, South America, and others.

The barbecue on Saturday, October 20, at Boulder Crest, the home of Dr. and Mrs. E. C. Thrash, was a delightful climax to the week's festivities, being the first opportunity of many of the guests to attend a real old-fashioned Georgia barbecue.

The lovely house and grounds of the Boulder Crest Estate were never more beautiful than on this special occasion. About twelve hundred guests were present to enjoy the delightful hospitality of Dr. and Mrs. Thrash.

Assisting Dr. and Mrs. Thrash were the members of the barbecue committee: Dr. and Mrs. G. F. Klugh, Dr. and Mrs. J. B. White, Dr. and Mrs. W. E. Barber, Dr. and Mrs. T. J. Collier, Dr. and Mrs. W. C. Dabney, Dr. and Mrs. J. R. Fuller, Dr. and Mrs. O. S. Cofer, Dr. and Mrs. S. T. Brown, Dr. and Mrs. Spencer Kirkland, and Mrs. W. A. Selman.

The Coffee Shop

The Coffee Shop which was operated at the Auditorium throughout the week of the convention by a committee from the Woman's Auxiliary to the Fulton County Medical Society was of inestimable value to the convenience and comfort of the visiting doctors.

It was successfully operated through the untiring efforts and the capable management of Mrs. Allen H. Bunce and her co-workers: Mesdames J. A. McGarity, E. A. Allen, S. T. Brown, J. R. Childs, M. T. Edgerton, H. F. McDuffie, John Funke, George Niles and J. R. Barfield.

Respectfully,
MRS. JAMES N. BRAWNER,
General Chairman Entertainment Committee for Women, Interstate Post Graduate Assembly.

PRIMARY ANEMIA

(Continued from Page 490)

technique of staining the blood for study is very simple. A 0.5 per cent solution of Brilliant Cresyl Blue in 95 per cent alcohol is used. One drop of the stain is placed upon a thoroughly clean cover slide and allowed to dry, after which it is polished by rubbing on smooth paper. A drop of the patient's blood is taken on another cover slip and immediately approximated to the slip with the stain, drawing the two slips apart quickly. The slip with the stained blood can then be placed upon a regular glass slide and examined under oil. Just how the reticulated cells are affected by the treatment is a question. In pernicious anaemia there is a demand for new blood cells which are liberated before they have matured. This is indicated by the presence of nucleated red cells. Under treatment, the cells liberated gradually become more mature and the embryonal cells decrease in number, although the reticulocytes show a considerable increase during the early period of treatment. It is this increase in reticulocytes which helps to gauge the success of the treatment. The patients are all improved, and none of them so far as we have seen have died of pernicious anaemia, but we do not know the exact effect of the treatment upon the blood producing organs.

Dr. Glenville Giddings, Atlanta (closing):
I wish to express my appreciation for the discussion, and will close by reading my conclusions at this time.

Experiments made by William H. Welker; Edmund Andrews and William Thomas, Chicago (*Journal A. M. A.*, Nov. 17, 1928), seemed to show that in nephritis the blood proteins in the urine either have adsorbed, or hold in definite chemical combination, some lower protein cleavage products. The idea is suggested that possibly the elimination of blood proteins can be explained on the basis that the body uses this means for detoxifying the split protein products and then the kidney removes them from the blood because they now resemble in part foreign proteins.

Georgia State Nurses' Association

OFFICERS

| | | | |
|--------------------------|---|-------------------------|---|
| President..... | Miss Annie Bess Feebeck, R.N. Grady Memorial Hospital, Atlanta | | |
| 1st Vice-President | Miss E. Alma Brown, R.N. University Hospital, Augusta | 2nd Vice-President..... | Miss Jessie Veazey, R.N. St. Andrews Apt., Atlanta |
| Secretary..... | Mrs. Alma E. Albrecht, R.N. Georgia Infirmary, Savannah | Treasurer..... | Miss Jane Van De Vrede, R.N. 105 Forrest Ave., N.E., Atlanta |

TWENTY-SECOND ANNUAL CONVENTION OF THE GEORGIA STATE NURSES' ASSOCIATION

About two hundred members and delegates attended the twenty-second annual convention of the Georgia State Nurses' Association, held in Columbus, November 8-10. The Georgia League of Nursing Education and the State Organization for Public Health Nursing also convened at this time, with separate programs.

All meetings were held in the First Baptist church.

Miss Annie Bess Feebeck of Atlanta, president of the G. S. N. A., presided over the meetings of that organization.

The meeting on the afternoon of November 8th brought together the representatives of a number of other state organizations, official and unofficial, all directly or indirectly interested in health, health education or medical and nursing problems. Among the groups participating in the program on this occasion were the Medical Association of Georgia, the Woman's Auxiliary to the Medical Association, the State Board of Health, State Education Association, State Parent-Teacher Association, State Federation of Women's Clubs, Georgia Children's Home Society, the M. L. I. Nursing Service, the National American Red Cross and others.

At the first or morning session, November 8th, reports of officers, committees, districts and alumnae associations were given and the president delivered her annual address, giving a recapitulation of the effort of the G. S. N. A. the past year and an inspiring message to the members regarding their responsibility to the profession and to the various projects sponsored by the organization.

Meeting Open to Public

A meeting open to the general public took place Thursday evening, November 8th, and Mrs. Anne L. Hansen, president of the National Organization for Public Health Nursing, and Mrs. Allen H. Bunce, president of the Woman's Auxiliary to the American

Medical Association, were the principal speakers.

Mrs. Hansen's subject was "The Nurse and the Community," and her paper was forceful and inspiring, being an interpretation of modern nursing and the need for a 'right about face' attitude in dealing with many of the present problems. She pointed out a maladjustment of nurse distribution; the need of the establishment in communities of an Official Registry which can work for an equalization of service, concerning itself with placement not only of the graduate, but of the undergraduate and practical nurse, and also with the provision of what might be termed a "bureau of education," through which literature can be obtained, lectures and institutes conducted, etc. Mrs. Hansen suggested hourly nursing as a means of affording a nursing service where constant care is not required—to convalescents, etc. Mrs. Hansen also advocated group nursing. "I can conceive of an organization which will employ nurses for the regulation of private duty service. What this organization shall be is not clear at this time. It may differ in different communities. It may be a hospital; it may be a registry, or it may be a visiting nursing association. *In a rural community, the most commonsense plan yet suggested is that of a community hospital, from which shall radiate every type of service needed for care of the sick and for public health activities. Any such nursing organization in a rural community would eliminate most of the difficulties nurses now find whilst working out of the larger towns or cities, on individual basis.* There would be a secured income, companionship, a group of people at all times looking after the needs of the nurse. This organization would assure adequate service for patients, and secure a proper income, recreation, vacation, etc., for the nurse, and in case of hospitals, for the doctors also. It would naturally require capital to develop it, but methods have been found for more difficult enterprises than this. In England, private duty nurses have been working under organization for a generation, and I do not

believe that the British nurse desires to make any change. * * The benefits in connection with such service would reflect on cities as well as smaller communities, reducing the number of nurses waiting for work."

Mrs. Hansen also stressed the need of leadership, and a considerable part of her paper was devoted to the effort of the Grading Committee which is presenting to the nurses, to the medical profession, to educators and the lay public the true situation regarding nursing today. She gave the four primal tasks confronting the nursing profession today (1) To reduce and improve the supply of nurses—to make a decisive and prompt reduction in the numbers of nursing students in this country, and to raise entrance requirements high enough so that only properly qualified women will be admitted to the profession; (2) To replace students with graduates—to put the major part of hospital bedside nursing in the hands of graduate nurses and take it out of the hands of student nurses; (3) To help hospitals meet costs of graduate service; to assist hospitals in securing funds for the employment of graduate nurses, and to improve the quality of graduate nursing service so that hospitals will desire to have it; (4) To get public support for nursing education—to place schools of nursing under the direction of nurse educators instead of hospital administrators; and to waken the public to the fact that if society wants good nursing it must pay the cost of educating nurses. Nursing education is a *public* and not a private responsibility.

Mrs. Bunce brought greetings from the Woman's Auxiliary to the American Medical Association and spoke to the converse side of Mrs. Hansen's paper, her subject being "The Community and the Nurse." She said that the success in bringing about a better working relationship between nurses and doctors today depends upon a more general knowledge of the true situation now affecting this fairly new profession. * One of the strongest points between the community and the nurse is the difficulty of obtaining a satisfactory and adequate nursing service in the home. Very often nursing schools are established and maintained by hospitals primarily for their own advantage; therefore, young women cannot be adequately trained. The nurse very rightly is entitled to reasonable hours, adequate income, constructive leadership and professional growth. The community wishes her to have all of these, provided the cost can be reduced!

Georgia League of Nursing Education

The Georgia League of Nursing Education convened Friday morning, November 9, with Mrs. Eva S. Tupman, president, in the

chair. A symposium on Service Ideals from the standpoint of the Instructor, the Supervisor and the Superintendent brought out very interesting points and suggestions. The president's address dealt with the progress and program of the League. The business session resulted in the election of the following officers: Mrs. Eva S. Tupman, president, and Mrs. Mae M. Jones, treasurer, re-elected. As directors, Miss Mattie Lou Banks of Macon and Miss Alice F. Stewart of Augusta.

State Organization for Public Health Nursing

To the State Organization for Public Health Nursing was given the afternoon program. Mrs. E. C. Westcott, acting president, introduced Mrs. Hansen, who brought greetings and helpful information from the N. O. P. H. N., and inspiration from her own great personality. "Tuberculosis Among Young Women" was the subject of a splendid paper by Mrs. Myrtis Worley of the Atlanta Tuberculosis Association. "The role of the Public Health Nurse in the School" was an interesting paper, supported by excellent charts, given by Mrs. Leila C. Peyton. "Gleanings from the International Clinics" was presented by Miss Emma Habenicht, local supervisor of the M. L. I. nursing service, Atlanta.

During the business session of the S. O. P. H. N. the following officers were elected to serve for 1929: Miss Emma Habenicht, president; Miss Lillian Alexander, Atlanta, first vice-president; Miss Hattie Weldon of Columbus, second vice-president; Miss Evelyn Dugger, Atlanta, secretary; Miss Dorothy Treacle, Savannah, treasurer. Miss Virginia Gibbs of Marietta, Mrs. Alma Albrecht of Savannah, and Miss Helen Hatch of Savannah, were elected as nurse directors; while Mrs. John Fletcher of Columbus, president of the Public Health Nurse Association, was elected non-nurse director.

Student Nurses Participate

Student nurses participated in the program of the G. S. N. A. this year for the first time. An essay contest was conducted by the Committee on Ethics, and Miss Jane Van Ness of the City Hospital, Brunswick, was the winner of the first prize. Miss Sally O'Bannon of Wesley Memorial and Miss Lucile Dale of the Fitzgerald Hospital came second and third respectively.

This interesting program on Saturday morning was followed by that of the Private Duty Section, which was presided over by Miss Jean Harrell, chairman. Dr. C. K. Sharp of Arlington, president of the Medical Association of Georgia, was the principal

BOOK REVIEWS AND ABSTRACTS

Mark S. Dougherty, M. D.
Department Editor

BOOK REVIEWS

Syphilis, By Henry H. Hazen. Professor of Dermatology and Syphilology, Medical Department of Georgetown University; Professor of Dermatology and Syphilology, Medical Department of Howard University.

Second Edition. Cloth. Price \$10.00. Pp. 643, with 165 illustrations. St. Louis; The C. V. Mosby Company. 1928.

This is the second edition of one of the most practical treatises on the subject which the practitioner can have. Dr. Hazen has written fully from his own wide experience and observation and the bibliography is complete.

The chapters on Occurrence and Economic Importance, Syphilis of the Nervous System, Diagnosis, Prophylaxis and Treatment have been entirely rewritten and brought up to date.

The outline of the Kahn Test, tryparsamide and malarial therapy are some of the new additions. There has been little change in the other chapters.

STUART H. SHIPPEY, M.D.

Diseases of Children. Chapin and Royster. Sixth Edition. Wm. Wood & Co., 675 pages, 1928.

This work has been brought up to date by rewriting much of the original text and the addition of much new material. The first part of the book deals with the new born and young infants. There is an excellent discussion of the normal child as well as the diseases met with in early life. Chapters five and six, dealing with the methods used in the examination of the sick child contain much valuable information. There are brief but thorough chapters dealing with infant feeding and a very excellent chapter on the care of the premature baby. The rest of the book covers the diseases of the various systems of the body. There is a good description of the Exanthemata. The illustrations are good, many are new and there are several colored plates.

The authors are to be congratulated upon their ability to condense so much valuable information. The book should make an excellent text for students and doctors in general medicine.

LEWIS D. HOPPE, M.D.

Criteria For the Classification and Diagnosis of Heart Disease—By a committee, Joseph H. Panton, M.D.; Robert L. Levy, M.D.; W. C. Munly, M.D., M.C., U.S.A.; Harold E. B. Pardee, appointed by the heart committee of the New York Tuberculosis and Health Association, Inc., and arranged in conformity with the nomenclature for cardiac diagnosis approved by the American Heart Association. First edition. Pages

ninety-two. No illustrations. Published by Paul B. Hoeber, Inc., New York, 1928.

I heartily welcome and endorse this book as the need for it has long been felt. As stated in the preface the study of any disease in an intelligent manner necessitates uniformity of nomenclature and uniform criteria for using the nomenclature.

This book should prove of interest to all engaged in the study of heart disease which is still captain of the men of death and probably always shall be. It should be of especial value for teaching purposes and for use in clinics and hospitals.

The introduction tells of the aims of the authors and the sources from which the material was gathered using the same nomenclature and criteria.

The body of the book is divided into two main sections, one dealing with criteria for nomenclature and the other dealing with criteria for diagnosis. The criteria in each section are divided into chapters as follows: Etiological, Anatomical, Physiological, Functional Capacity, Possible Heart Disease, and Potential Heart Disease.

Every one should have this book in his library.

EVERT A. BANCKER, JR., M.D.

Diabetic Manual for Patients—By Henry J. John. The C. V. Mosby Co., St. Louis. Pages 196. Figs. 42. Price \$2.00.

The successful management of patients who have diabetes mellitus is a matter of grave concern to every practicing physician. Coping with this disease is largely the patient's problem and he must understand the nature of the disease and the principles of its treatment. To fulfill this need diabetic manuals, making available in an understandable way the information that these patients should have, are indispensable. The successful treatment of diabetes has largely resolved itself into teaching the patient how to care for himself. This little book fulfills this purpose admirably. It explains to these patients the nature of their disease and what their outlook on life should be. The relation of obesity is forcefully brought out. The necessity of frequent examinations of the urine for sugar and the technique of this test is explained. The chapter on diabetes in children strongly advises the hospitalization of these patients, the part that diet and insulin play in their treatment and particularly the necessity of teaching the mother the care of her diabetic child.

The chapter on diabetic arithmetic is of exceptional value. It teaches the diabetic how to weigh and calculate his diet accurately, explaining the relative part that carbohydrates, protein and fat play in the diet. Exhaustive food tables are included in the book and food values are explained so as to enable even a diabetic of poor intelligence to follow his diet.

A chapter is devoted to hygiene for the diabetic patient. The book presents a wealth of valuable information for the diabetic patient in such a simple and clear-cut way that it is easily understood by the lay mind.

M. S. D.

A Practical Medical Dictionary of words used in medicine with their derivation and pronunciation, including dental, veterinary, chemical, botanical, electrical, life insurance and other special terms; anatomical tables of the titles in general use, and those sanctioned by the Basic Anatomical Convention; pharmaceutical preparations, official in the U. S. and British pharmacopœias and contained in the national formulary, and comprehensive lists of synonyms, by Thomas Lathrop Stedman, A.M., M.D., Editor of the "Twentieth Century Practice of Medicine" and of the "Reference Handbook of the Medical Sciences," formerly Editor of the "Medical Record." William Wood Co., New York, pages 1194, price \$7.50.

This is the tenth edition of a popular medical dictionary. It contains nearly five hundred new medical terms. The changing uses of many old terms is taken note of. Many obsolete words and terms are omitted. A table of microparasites giving their accepted correct name, synonyms and individual characteristics is a valuable addition to the appendix.

M. S. D.

BOOKS RECEIVED

Syphilis Acquired and Heredisyphilis—By Charles C. Dennie, B. S., M.D., Assistant Professor of Dermatology and Syphilology, University of Kansas School of Medicine; Chief of Heredisyphilic Clinic, Children's Mercy Hospital; Chief of Syphilitic Clinic, Kansas City General Hospital. Contains 304 pages. Publishers: Harper & Brothers, 49 East 33rd Street, New York City, N. Y. Price \$2.50.

The Examination of Patients—By Nellis B. Foster, M.D., Associate Physician in the New York Hospital; Associate Professor of Medicine at Cornell University College of Medicine. Second edition revised. The first edition brought many letters from physicians who believed the book had been of practical help to them. It is being recognized today to a degree never before true that clinical medicine rests on accurate diagnosis. The treatment of symptoms, in any major sense, an abbreviation that has vanished. This book treats with the ability to seize on those few relevant facts out of a mass of data that has always marked the true clinician. Contains 392 pages. Publishers: W. B. Saunders Company, West Washington Square, Philadelphia. Price \$4.50.

Text Book of Urology for Students and Practitioners—By Daniel E. Eisendrath, M.D., Attending Urologist Michael Reese and Chicago Memorial Hospitals; Assistant Professor of Surgery (Genito-Urinary) Rush Medical College of the University of Chicago, and Harry C. Rolnick, M.D., Associate Uro-

gist, Mt. Sinai Hospital; Adjunct Urologist Michael Reese Hospital; Formerly Associate in Genito-Urinary Surgery, Northwestern University Medical School. Contains seven hundred black and white illustrations and eleven in color. Daily contact with the general practitioner and medical student in clinics has impressed us with the lack of text-book on Urology which presents the subject in the simplest possible manner. The study of venereal diseases no longer constitutes the chief portion of the subject. The diagnosis and treatment of diseases of the urinary tract in both sexes and of the male genitalia, have attained a place of equal importance. Publishers: J. B. Lippincott Company, Washington Square, Philadelphia, Pennsylvania. Price \$9.00.

NEWS ITEMS

Dr. and Mrs. Hugo Robinson Albany, celebrated their golden wedding Sunday, October 14th, at their home on South Madison Street. Handsome presents and the most cordial wishes for many more years of happiness were showered upon them by hundreds of friends who called during the day.

Dr. J. L. Bollman, Rochester, Minn., delivered an address on Recent Advances in the Physiology of the Liver and Gallbladder before the Fulton County Medical Society on October 12. He was a guest of Dr. and Mrs. Harold M. Bowcock while in Atlanta.

The American College of Surgeons announces that the following hospitals in Georgia have been approved for 1928: Phoebe Putney Memorial Hospital, Albany; Athens General Hospital and St. Mary's Hospital, Athens; Davis-Fischer Sanatorium, Georgia Baptist Hospital, Grady Hospital, St. Joseph's Infirmary and Wesley Memorial Hospital, Atlanta; University Hospital, Wilhenford Children's Hospital, Augusta; City Hospital, Columbus; Scottish Rite Hospital, Decatur; Downey Hospital, Gainesville; Macon Hospital, Macon; Wise Sanatorium, Plains; Harbin Hospital, Rome; John D. Archbold Memorial Hospital, Thomasville; Atlantic Coast Line Hospital, Waycross; United States Marine Hospital, Savannah.

Drs. B. H. Minchew, W. D. Mixson and H. J. Carswell, Waycross, have held free clinics and performed operations on children, where necessary, whose parents were unable to pay for their services.

Dr. and Mrs. H. M. Carter, Madison, Wisconsin, were the guests of Mrs. Carter's parents, Rev. and Mrs. L. H. Kelley, Atlanta, during the annual convention of the Inter-State Post Graduate Medical Association.

Dr. Edmund L. Gros, Paris, President of the Board and Chief of the Medical Staff of the American Hospital of Paris, attended the Inter-State medical meeting. He stated that the American Hospital of Paris is the only hospital in Europe exclusively for Americans. The institution was established to prevent

American travelers from falling into the hands of second-rate physicians.

Dr. C. W. Roberts, Atlanta, was appointed chairman of the Committee on Nominations for officers of the Inter-State Post Graduate Medical Association.

Dr. Julian K. Quattlebaum, Savannah, Editor of the Bulletin of the Oglethorpe Sanatorium, has just published the fourth number of the bulletin which contains articles entitled as follows: Ureteral Stricture by Dr. L. W. Shaw; Tumors of the Mesentery, by Dr. J. N. Carter; The Physiology of Subarachnoid Nerve Block, by Dr. M. J. Epting; The Treatment of Puerperal Infection by Dr. E. Carson Demmond.

The United States Civil Service Commission announces an open competitive examination for a Cytologist. Applications must be on file with the Civil Service Commission, Washington, D. C., not later than November 28. The examination is to fill a vacancy in the Hygienic Laboratory, U. S. P. H. S., Washington, D. C., and vacancies occurring in positions requiring similar qualifications. The entrance salary is \$3,700.00 per annum. Higher salaried positions are filled through promotion. Competitors will not be required to report for examination at any place, but will be rated on their education, training and experience. Full information may be obtained from the United States Civil Service Commission, Washington, D. C., or from the secretary of the United States Civil Service Board of Examiners at the post office or customhouse in any city.

Dr. Harmon Snow, formerly of Clermont, has removed to Experiment.

Dr. W. C. Rappleye, Director of Study, Commission on Medical Education, 215 Whitney Avenue, New Haven, Connecticut, states that its Third Report has been completed and a copy will be mailed gratis to any member of the Association on request.

Dr. William H. Kiser, Jr., announces the opening of his offices at 707 Medical Arts Building, Atlanta. Practice limited to diseases of children.

Dr. William D. Haggard, Professor of Surgery at Vanderbilt University School of Medicine, Nashville, Tennessee, was named president-elect of the Inter-State Post Graduate Medical Association of North America at its closing session in Atlanta, October 19; Dr. William B. Peck, Freeport, Illinois, was elected managing director; Dr. Edwin Henes, Jr., Milwaukee, Wisconsin, executive secretary and director of exhibits; Dr. George V. I. Brown, Milwaukee, Wisconsin, speaker of the association; Drs. William J. and Chas. H. Mayo, Rochester, Minnesota, presidents of clinics.

Dr. Chas. E. Dowman, Atlanta, entertained fifteen guests at dinner at the Druid Hills Golf Club, October 18th, in honor of Dr. Howard Naffziger of San

Francisco, Dr. Walter E. Dandy of Baltimore, and Dr. Chas. Frazier of Philadelphia.

Dr. J. L. Campbell, Atlanta, was host to a group of prominent physicians at luncheon, October 19th, at the Atlanta-Biltmore hotel. Luncheon was given in honor of Dr. Llewellys Barker, Baltimore; Dr. J. C. Bloodgood, Baltimore; and Dr. Chas. H. Mayo, Rochester.

Dr. Llewellys Barker, retiring president of the Inter-State Post Graduate Medical Association of North America, paid a glowing tribute to Governor L. G. Hardman, M. D., at a banquet held at the Biltmore hotel, for his phrenological and other scientific studies of the constitutional characteristics of condemned criminals.

Dr. Herbert S. Alden announces the opening of offices at 711 Medical Arts Building, Atlanta. Practice limited to dermatology.

THE STATE'S SACRED DUTY

(Continued from Page 522)

had for the welfare of each individual child, his wonderful patience, and the patience of those with whom he has surrounded himself, with knowledge of mental cases which enables him to quickly classify the low type from the higher type and segregate them, his bigness of heart and ambition to make the Gracewood school one of the greatest institutions in the United States, stamp Dr. Oden as one of the most remarkable men of the entire state and section and one who is ideally fitted for his job."

There are between 400 and 500 boys seeking admission to the institution, and it is an appeal that is a direct challenge to the next legislature to increase the maintenance appropriation and provide funds for new buildings and equipment.

The state cannot minimize its obligation to feeble-minded children. They are to be pitied, and to fail to do a full duty by them is unthinkable. Many of them are having their minds strengthened, and can yet go out into the world as useful citizens. The door of opportunity should be opened to every such child in the state. And it is a duty the legislature cannot with credit escape, nor should it seek to do so.—Editorial, Atlanta Constitution, November 25, 1928.

TWENTY-SECOND ANNUAL CONVENTION OF THE GEORGIA STATE NURSES ASSOCIATION.

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speaker. He discussed nursing service in the rural districts. "I am thoroughly acquainted with the difficulties to be faced by a nurse serving in rural communities," said Dr. Sharp. "Especially is this service difficult where the nurse has little adaptability, for as a rule there are no conveniences, social life nor amusements, and unless a nurse has an unusual 'sense of humor' there appears little to attract her to this type of service. In all, she must be endowed with the love of her profession to be able to see 'the silver lining' of every cloud in dealing with rural patients. * Apparently the time is rapidly approaching when the rural districts will be deprived of immediate medical service unless one of two things, or both, happen, namely, the underwriting of compensation to the doctor by groups of responsible citizens, or the establishment of a community hospital supported by county or other agencies. The same will apply to nursing service."

"How to Solve the Problem of the Over-supply of Nurses in Georgia" was the subject of a paper prepared jointly by Miss Elmina Austin, Miss Marguerite Medlock and Miss Lillian Parker, all of Wesley Memorial, and read by Miss Parker. Miss Vera Mingledorff of Savannah, a graduate of Oglethorpe Sanatorium, contributed a splendid paper, "What Can be Done in Georgia Regarding the Conclusions of the Grading Committee."

Miss Margaret Dorn of Augusta was elected chairman of the Private Duty Section by acclamation during the business session of this group, and Mrs. Joseph Akerman, also of Augusta, was named as secretary.

American Red Cross

A "Red Cross Hour" was one of the bright features of Saturday's program and was conducted by Miss Lillian Cumbee, Chairman of the State committee. "America the Beautiful" was sung in unison, and after reports Miss Ruth Mettinger, Nursing Field Representative for Georgia, and Major Frank Green, Director of Red Cross activities at Fort Benning, addressed the delegates. Miss Lillian Alexander was named delegate to the Red Cross Conference to be held in Washington, D. C., in 1929; alternate, Miss Hattie Wilder of Macon.

The final session of the Georgia State Nurses' Association conference came Saturday afternoon, when Rome, Ga., was named

as the city for the 1929 convention of this organization. An election of officers resulted as follows: Miss Annie Bess Feebeck, re-elected as president; Miss M. Celia Johnson of Atlanta, elected as first vice-president; Miss Gwinnette Doughty, Augusta, second vice-president; Mrs. J. F. Hawthorne, Atlanta, secretary, and Miss Jane Van De Vrede, re-elected treasurer. Miss Vera Mingledorff of Savannah, as Counsellor.

Socially, the convention was one of the most delightful ever experienced by members of the G. S. N. A. The city of Columbus, through its local organizations, groups and individuals, contributed a hospitality unsurpassed and entertainment which was highly enjoyable. The special features included a tea given by the nurses at the station hospital, Ft. Benning; a luncheon tendered by the members of the Muscogee County Medical Society; a reception and tea by the City Federation of Women's Clubs; a banquet at the Ralston, followed by a dance at the Muscogee Club, given by the Chamber of Commerce. Mrs. Isadore Hermann, president of the Fifth District of the G. S. N. A., was chairman of arrangements and official hostess.

INFANTILE ECZEMA

(Continued from Page 500)

as a baby, many of them from six months up to three, four or five years of age, when they stop having eczema and develop asthma. Let us not disregard this theory but work it out along with the other treatment we have.

Dr. Benjamin Bashinski, Macon, (closing): In reference to Dr. Davison's skin tests, I have tried repeatedly but up to date have not found them successful, and they have not been of much use in discovering the cause for the eczema.

I did not mention the fad that seems popular today, the violet-ray treatment of eczema. I have tried it on one or two patients but think it aggravates the condition. I have given up the idea of getting any benefit from the x-ray or the violet ray in eczema. In the cases that calamine lotion does not relieve we seem to get some benefit from the use of aluminum acetate. The change of feeding intervals seems to help in some instances, when we put the intervals further apart. Why, I do not know, but it may be because we are limiting the starch and sugar and this seems to arrest but does not cure the cases. I know nothing that cures them except time.

Medical Association of Georgia

Next Annual Session, Macon, Ga., May 8, 9, 10, 1929

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Fraternal Delegates to Other State Meetings

To visit Alabama: R. F. Wheat, Bainbridge; J. C. Patterson, Cuthbert.

To visit Florida: K. McCullough, Waycross; Gordon Chason, Bainbridge.

To visit North Carolina: Paul L. Holliday, Athens; Hal M. Davison, Atlanta.

To visit South Carolina: V. P. Sydenstricker, Augusta; C. H. Richardson, Jr., Macon.

To visit Tennessee: Trammell Starr, Dalton; R. C. Maddox, Rome.

NEWS ITEMS

The Eleventh District Medical Society met at Valdosta on November 8th. Dr. J. A. Redfearn, Albany, read a paper on Malta Fever; Dr. H. G. Huey, Homer-ville, Peniculous Anemia; Dr. J. W. Shearouse, Savannah, Urethral Obstruction; Dr. C. W. Roberts, Atlanta, Some Problems in Neck Surgery; address by Dr. C. K. Sharp, Arlington, President of the Association. The Lowndes County Medical Society was host to the members and visitors at dinner served at the Valdes hotel.

Dr. W. W. Binion, Benevolence; Dr. J. C. Patterson and Dr. G. Y. Moore, Cuthbert; attended the meeting of the Stewart-Webster Counties Medical Society at Richland on November 8.

Dr. Edward Francis of the United States Public Health Service, was recently presented a gold medal by the Committee on Awards of the American Medical Association which reported that they considered his investigations on the disease of Tularemia the most important medical work of the year.

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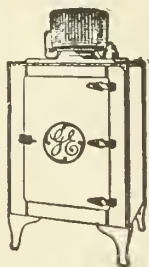
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No. 12

THE SURGICAL TREATMENT OF PULMONARY TUBERCULOSIS*

HUGH N. PAGE, M. D.

Augusta

Almost all of the modern procedures for the surgical treatment of pulmonary tuberculosis are based upon the theory that by compression of the tissue of the affected lung, a much more definite state of rest can be secured, and rest has long been the classical treatment for tuberculosis in all its forms.

Artificial pneumothorax, or the filling of the pleural cavity with air was the first attempt at mechanical compression. This was first suggested by James Carson of Liverpool in 1821. Forlanini in Italy and John B. Murphy of Chicago seem to have been the first to put it into practical use. This form of treatment is now very generally accepted by the majority of phthisiotherapists, but unfortunately even in the cases in which it is indicated, complete collapse is often unobtainable on account of adhesions between the parietal and visceral pleura which serve to hold the lung to the thoracic wall.

In 1907, Brauer and Friedrich, realizing that more definite compression was necessary in many cases, resected almost the entire length of the second to ninth ribs. This of course gave excellent collapse, but was a most formidable procedure with quite a high mortality, and although modified by them through the introduction of regional anaesthesia and multiple stage operations, has generally fallen into disuse.

Wilms in 1911 demonstrated that extrapleural paravertebral resection of several inches of the ribs had a greater healing effect on the lung lesions than other procedures. Sauerbruch in 1909 had performed a para-

vertebral resection. To these two men should be given credit for the operation which is today the accepted routine in the treatment of pulmonary tuberculosis by thoracic surgeons; namely extrapleural thoracoplasty. This consists of the subperiosteal removal of varying lengths of the ribs, beginning at the transverse processes of the vertebra and extending outward, the greater lengths being taken from the lower ribs. The first to the eleventh ribs inclusive are resected.

Stuertz in 1911 proposed phrenicotomy or section of the phrenic nerve with resulting paralysis of one half of the diaphragm in the treatment of tuberculosis. This procedure has been found most useful. On account of the frequent presence of an accessory nerve and the temporary paralysis of the diaphragm when the nerve was merely sectioned, a more radical procedure has been very generally accepted, exercises or the avulsion of the phrenic nerve after section. This gives a permanent paralysis of one half of the diaphragm and includes removal of the accessory phrenic when present.

Several other surgical procedures have been proposed, but they are of use only in the exceptional case and consequently will not be gone into here. Among them may be mentioned intra and extra pleural pneumolysis or the freeing of the lung, either intra or extra pleurally, with the interposition of some foreign substance such as fat or paraffin between the lung and thoracic wall to obtain compression.

Jacobaeus in 1913 devised a method of dividing adhesions with a cautery used through a thoracoscope inserted into the pleural cavity between the ribs. This instrument closely resembles the cystoscope.

Both English and American surgeons have been very slow to adopt thoracic surgery. Central Europe has been far in the lead in the development of this branch of surgery.

*Read before the Medical Association of Georgia, Savannah, Ga., May 11, 1928.

With the exception of a few outstanding pioneers, among them Willy Meyer and Torek of New York, little has been done along this line until very recently when under the stimulation of the work done by these men and by Lilienthal, Graham and Alexander, thoracic surgery bids fair to come into its own.

Artificial pneumothorax is the simplest of the mechanical methods for obtaining compression. This is indicated in those cases in which the tuberculous lesion is predominantly confined to one lung. Alexander (1) estimates this as ten per cent of all cases. It is especially indicated in hemoptysis, and in rapidly progressive pneumonic, caseous or "exudative" types, which do not do well under the usual medical treatment. In these cases it causes a collapse of all cavities, a stasis in the lymphatic circulation, and a passive congestion of the lung due to compression of the veins. The fibrous tissue increases greatly and tends to wall off the active foci. Unfortunately in many cases suitable for artificial pneumothorax, this was unsuccessful on account of adhesions between the lung and the parietal pleura. Matson *et al* estimate this as forty per cent.

Artificial pneumothorax has the advantage over thoracoplasty in that later when the lesions are healed or in emergencies, such as pneumonia in the contra lateral lung, the affected lung may be released. On the other hand some cases re-establish their activity upon release of the lung. The dangers of artificial pneumothorax are gas embolism, rupture of the lung and purulent pleural effusions from infection by the needle or from disease. Repeated refills are necessary in artificial pneumothorax and the compression is elastic.

Extrapleural thoracoplasty overcomes most of the difficulties and dangers of artificial pneumothorax. The objections offered to its use are that it is a very extensive operation and that the patients are not in sufficiently good condition to warrant a major operation. Those offering these objections fail to consider two extremely important factors; first the use of local or paravertebral anaesthesia, this serves practically to obviate shock, and

the division of the operation into two or more stages materially cuts down the extent of each operation. The deformity following thoracoplasty is slight and scarcely noticeable when the patient is clothed.

While it is true that some of the cases continue to progress in spite of operation, this is really no valid objection as it must be remembered that the cases suitable for this treatment are all serious and rapidly progressive and without the added chances offered by operation would soon reach an untimely end.

The advantages of thoracoplasty over artificial pneumothorax are that it gives a permanent solid compression, if the lesions once become quiescent there is less chance of recurrence; the presence of adhesions does not affect in the slightest degree the amount of compression obtainable; it is the only method in fibrous or "productive" types with cavitation by which collapse of the cavity can be obtained; it obviates most of the dangers of artificial pneumothorax; gas, embolism, rupture of the lung and empyema.

In the selection of cases the closest of co-operation must exist between the internist and the surgeon. Frequent physical and x-ray examination should seek to establish the exact location and extent of the tuberculous lesions. The lesions should be predominantly confined to one lung, but the involvement of the entire affected lung is no contra indication to operation. The slight involvement of the contra lateral lung, the co-existence of laryngeal or intestinal tuberculosis are not contra indications, for often with the cure of the main focus, these lesser foci will improve or disappear. Few physicians recommend operation until the usual medical treatments and even artificial pneumothorax have failed. Often however it is impossible for patients to carry out long medical treatments, for financial and other reasons and to these thoracoplasty is of great advantage. Thoracoplasty should be limited to patients between 15 and 45 years of age. While of course a good general condition of the patient is a helpful factor, even very ill patients with fever, cavitation and much



Figure 1

Case IV. E. L. S., Preoperative; arrows point to three cavities in right lung.



Figure 11

Case IV. E. L. S., 8 months postoperative; showing amount of collapse.

sputum stand a two stage operation remarkably well.

In the earlier days of thoracoplasty, as the lesions are more frequent in the apex, the upper ribs were resected in the first stage leaving the lower ribs for a later operation. When some of the cases developed post-operative pneumonia, Wilms concluded that this was due to aspiration from the collapsed lung above into the expanded lower lung and recommended resection of the lower ribs at the first stage and the upper ribs at a second. Later it was found that the activity of the cough reflex was the most important factor in eliminating aspiration pneumonia. This reflex is sometimes inhibited by pain in the incision, but it has been found that with paralysis of the diaphragm by phrenicotomy, the strong abdominal muscles, by increase of intra abdominal pressure are much better able to empty the lower lung in coughing.

We believe that the sequence proposed by Alexander is probably the most useful in the surgical treatment of pulmonary tuberculosis. The first stage consists of excision of the phrenic nerve for the paralysis of the diaphragm. The second stage paravertebral extrapleural thoracoplasty from the 7th to the 1st ribs inclusive. If necessary at a third stage paravertebral extrapleural thoracoplasty from the 11th to the 8th ribs inclusive. It is especially important that as large a sec-

tion of each rib as possible be removed, and that posteriorly, the rib be removed as far back as the transverse process of the corresponding vertebra. The first rib should always be sectioned to release the lung apex. Local or paravertebral anaesthesia is the method of choice. Although it may sometimes be necessary to supplement this with gas, it has not occurred in our cases. The time elapsing between the stages of a multiple stage operation is two weeks.

After operation active compression of the thorax by some form of elastic bandage should be instituted and this continued until bony union has taken place between the cut ends of the ribs. Operative procedures by no means eliminate medical treatment, they merely shorten the duration and after operation medical treatment should be actively continued until there is a cessation of activity in the lesions.

Alexander (1) has collected up to 1925, 1159 cases operated on by thoracoplasty. Of these 36.8% were cured and 24.4% improved, a total of 61.2% benefited by operation; 38.75% became worse or died, only 14.1% directly or indirectly connected with the operation. The immediate operative mortality (within 48 hours) was less than 1.5%. The technique of operation has been much improved and we feel sure that more

recent statistics would show an even greater percentage of cases that are benefited.

The surgical treatment of pulmonary tuberculosis is surely worthy of your serious consideration in that it offers the opportunity, if not of cure, certainly of a more prolonged and far more comfortable existence, in those severe cases that without this effort would hasten to an early grave.

CASE REPORTS

MARGARET WRIGHT HOSPITAL NO. 1634.

CASE NO. I. O. S. B. white male age 24 merchant. Referred by Dr. A. S. Blanchard, Williston, S. C., first seen June 17, 1926. His father and one sister had died of tuberculosis. For a number of years had suffered from frequent colds. For past two years had had constant slight cough and a very gradual loss of weight. For past four months has had afternoon temperature of 100 to 102 degrees. Recently has suffered from shortness of breath, dizziness and extreme nervousness. No hemoptysis or night sweats. Severe attacks of pain in right iliac fossa at irregular intervals.

Examination: Poorly nourished male, blood pressure 115—95 with physical signs of advanced tuberculosis left lung, slightly involvement of right lung. Marked tenderness in right iliac fossa. X-ray shows extensive cavitation left lung with beginning involvement of right. The probability of his having ileocecal tuberculosis as well as tuberculosis of the lungs, his fair general condition, and the slight involvement of the contralateral lung led us to attempt collapse therapy in the hope of eliminating one focus that he might better resist the others.

Between June 20th and July 1st, four attempts at artificial pneumothorax were made with very poor results, due to adhesions. Extrapleural thoracoplasty was then decided upon. This was performed in two stages. One July 29, 1926 under paravertebral regional anaesthesia from 4 to 8 inches of the 11th to 7th ribs were resected. On August 6th, 2 to 6 inches of the 6th to 2nd ribs were resected. The patient recovered from operations and the wound healed without complication.

After his return home he improved very markedly, gained ten pounds in weight. This man had a fair chance but was very difficult to treat, as soon as he felt better he would get up and attempt to work, which of course would cause an exacerbation of his symptoms. In spite of his behavior, he lived for nineteen months after his operation, dy-

ing February 22, 1928 of symptoms chiefly referable to his ileo-cecal tuberculosis.

UNIVERSITY HOSPITAL NO. 21989

CASE NO. II. J. D. Negro female age 38. schoolteacher was referred by Dr. J. D. Gray, Augusta, on September 8, 1926. For two years previously she had suffered from a chronic cough, night sweats and occasional hemoptysis. The physical signs were much more marked on the right side, though there was some involvement of the left side. The larynx was also involved. Repeated attempts at artificial pneumothorax were unsuccessful on account of adhesions. Although this case was a very bad risk, the rapid progression and extension of the disease under medical treatment led us to attempt extrapleural thoracoplasty. The first stage was done September 9, 1926 when under paravertebral regional anaesthesia the 11th to 7th ribs, inclusive were resected, on the right side. The second stage was done on September 16th, one week later, when the 6th to 2nd ribs were resected. The patient recovered from operation without complication. The progress of the disease was definitely slowed down though not entirely arrested and the patient lived for one year afterward, dying on September 1, 1927.

UNIVERSITY HOSPITAL NO. 23847

CASE NO. III. P. M. Negro male age 24. laborer, referred by Dr. J. D. Gray, Augusta, January 16, 1927 with diagnosis of pulmonary tuberculosis. Cough began two and one-half months ago, accompanied by night sweats and afternoon temperature. There was also some involvement of the larynx. The physical signs of tuberculosis and x-ray showed that the disease was practically confined to the left lung. Attempts at artificial pneumothorax failed on account of adhesions. This was almost an ideal case for collapse therapy as the tuberculous process was practically entirely confined to one lung.

First stage extrapleural thoracoplasty under paravertebral regional anaesthesia performed January 18, 1927, when the 11th to 7th ribs, inclusive, were resected on left side. On January 25th the 6th to 2nd ribs inclusive, were resected. The patient's progress was excellent when suddenly on February 1st, one week after second stage operation he expired with the symptoms of embolism, although no autopsy was obtainable. This unfortunate complication was most disappointing to us as we had every reason to believe that this patient would have been markedly benefited if not cured by surgical measures.

MARGARET WRIGHT HOSPITAL NO. 2157

CASE NO. IV. Miss E. L. S. White fe-

male, age 20, single. Referred by Dr. T. G. Kershaw, Augusta, with active tuberculosis right lung and slight involvement of left. This patient had been undergoing a rigid medical treatment for two years, part of which had been spent in a sanitarium. First seen May 5, 1927. X-ray shows advanced tuberculosis right lung, there are cavities, the largest in infraclavicular region. Some involvement of left lung with thickened pleura, (Fig. 1). As after two years of medical treatment the process was not arrested, collapse therapy was decided upon. Several attempts at artificial pneumothorax were unsuccessful on account of adhesions. On July 23, 1927, the first stage of extrapleural thoracoplasty was performed under paravertebral regional anaesthesia and from 4 to 8 inches of the 11th to 7th ribs resected on the right side. On August 4th, the second stage was done in which the 6th to 1st ribs inclusive were resected. The patient made an uneventful recovery and her general condition has much improved. Should the improvement cease or should signs of increased activity occur an exeresis of the phrenic nerve will be done in order still further to collapse this lung.

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4. Gravesenm. J., *Surgical Treatment of Pulmonary and Pleural Tuberculosis*, New York, William Wood & Co. 1925. 1345 Greene Street.

DISCUSSION ON PAPER OF DR. PAGE

Dr. E. C. Thrash, Atlanta: Dr. Page asked me to discuss this paper in view of the fact that those who were to lead in the discussion are unable to be present. We are to be congratulated that he brought this matter before us, for thoracoplasty and invasion of the thorax occupies the same position now that invasion of the abdomen did when I was a medical student. That was looked upon then with about as much fear and dread as invasion of the thorax is now. These operations are being fearlessly done and good results being obtained. A most important thing in these procedures is to select the type of case and then do quickly what nature is attempting to do. If she does it at all, she accomplishes it very slowly. The first effort to make in tuberculosis is to put the structure at rest so that repair may take place. This is true also of all inflammatory conditions. One of the first things in a beginning tuberculosis is the impaired function of the diseased lung. A careful observer can note this as one of the first symptoms. How does this arise? Nature impairs

the activity of the muscles of respiration promptly. That impairment takes place, we do not know why, except that there is a reflex action just as in the repairment of bone or an inflammatory process. As she progresses in her repair the next thing she does is to bring about atrophic changes in the muscles, and by comparing the two sides of the thorax it can readily be seen that the muscles on the diseased side are undergoing atrophic changes. The next step is the development of plastic material fixing the lungs. This she starts in the mediastinum, and that is one of nature's best means of fixing the lungs. We cannot with the other methods fix the lung until nature builds up a wall in the mediastinum by fibrosis. Then the ribs begin to override each other, and the thorax narrows, and as the disease progresses the cavity will be almost obliterated, much as Dr. Page has done by surgical measures.

Dr. Frank K. Boland, Atlanta: I am sure we are indebted to Dr. Page for his paper. This is a comparatively new line of work but we will have more as time goes on. As Dr. Thrash brought out, the principal thing to be considered is the proper selection of the case. I have had three cases, with two fatalities. There the death was due to the collapse of the heart as well as the lung. We must be careful not to affect the heart as well as the lung. In Dr. Alexander's book he says most failures are due to heart failure, which means heart collapse, to my mind. I wish to show you a few pictures. In this one (slide) you see the collapse of the chest. This one (slide) shows the incision at about the middle of the clavicle curving downward to the outside and doing a subperiosteal resection of the ribs, decreasing in length. As Dr. Crawford brought out, the first rib certainly must be resected about an inch.

(Slide) This patient was a woman, aged 34, who was operated upon last July, with cutting of the phrenic nerve without exeresis. The beauty of this operation is that it can be stopped at any stage if the patient begins to go bad. (Slide) This shows the result accomplished, with complete collapse on this side. The woman has gained thirty pounds, has no cough, no sputum and no fever, and I think she will go on to a complete recovery. We must allow at least a year for recovery.

One feature Dr. Page mentioned is that these patients have very little if any deformity. This patient with her clothes on shows no deformity whatever.

Dr. William J. Cranston, Augusta: Dr. Boland gives us a mortality of 66 2-3 per

cent, and Dr. Page 75 per cent. With such mortality a timid soul would be tempted to abandon this procedure, but we must remember that this is a desperate condition that we are handling. If the patients with tuberculosis came to us early, in the majority of instances the malady would not proceed to this stage. Despite the opinion expressed by many of my colleagues I still find the detection of incipient tuberculosis very difficult. If we could get our tubercular cases early enough such procedures as thoracoplasty would be attempted in very few cases, for we could stop the progress of the disease. But since we do not see these patients early, and so frequently fail to recognize the disease if it does exist, cavitation develops. It is not recommended that cavitation on both sides of the lung indicates thoracoplasty. It does not. It is only in the case with one sided involvement that there is a fairly good response to thoracoplasty. We must bear in mind that with cavitation of one lung and slight involvement of the other it will be only a short time before the other lung is involved in cavitation, with a fatal outcome.

I wish to congratulate Dr. Page and Dr. Boland for continuing their work in this line.

Dr. Hugh N. Page, Augusta, (closing): I wish to emphasize particularly what Dr. Cranston has said. The point he made that only the cases, and there are many of them, which do not respond to medical treatment, no matter how early we get them or what we do, go on to this serious condition, and it is only in those cases that thoracoplasty is indicated. There will be a few cases that progress to this stage no matter what we do.

Dr. Crawford spoke of resection of the first rib. I do not think he looked carefully at the picture I showed, for the first rib is resected. I think this should always be done as one of the most important things.

I wish to thank the gentlemen for their discussion. I realize that I am talking about something that is comparatively new, and while it looks radical according to the pictures shown by Dr. Boland, it is really not as bad as it looks.

LEAD POISONING FROM WINE

The case of lead poisoning, reported by Millard Knowlton, Hartford, Conn. (Journal A. M. A., December 15, 1928), is of interest for the following reasons: (1) Lead was apparently conveyed to the patient through wine. (2) A relatively small amount of lead was required to produce symptoms. (3) An associated acute appendicitis was discovered on exploratory incision for a suspected gastric ulcer with perforation.

ZINC IONIZATION IN THE TREATMENT OF PURULENT OTITIS MEDIA*

FRANCIS B. BLACKMAR, M. D.

Columbus

In all research for antiseptics one great aim has been for deep penetration, in order that the antiseptic could spread *beyond* the deepest bacteria. It is claimed that mercurochrome is one of the most penetrating of germicides, and yet I could not demonstrate that it penetrated the epithelium, unless there was an ulcer, or similar break in the epithelium, present. Every ophthalmologist who has instilled any of the dyes, of which fleurescine is typical, into the eye knows that penetration only occurs at the site of an abrasion or ulceration. Indeed we use it in the eye to demonstrate these breaks in the epithelium. But having penetrated such a break these soluble dyes are quickly carried away, tremendously diluted by the lymph.

The electric current furnishes a pressure which carries antiseptics in through skin and mucous membrane, whether ulcerated or not, and the depth of penetration, within limits, depends on the strength of the current used and the duration of its use.

The simple experiment of Leduc will demonstrate this.

In the ear a solution of zinc sulphate is used. Friel's experiment illustrates the effect of zinc in an ionized condition on protein.

In this paper I wish to speak of the *Clinical* effect of zinc ions after they have been driven deep under the mucous membrane by the force of an electric current.

A solution of cocaine and adrenalin is instilled to anesthetize and shrink the mucous membrane. This is followed by a solution of zinc sulphate gr. 75, glycerine oz. 2, and water oz. 17, to be diluted with an equal volume of water when ready for use. The glycerine is added to reduce surface tension allowing intimate contact of the mucous membrane and bacteria with the zinc solution.

*Read before the Medical Association of Georgia, Savannah, Ga., May 11, 1928.

When sure that the ear is clean a hard rubber ear speculum with a zinc electrode attached is inserted. This electrode is connected to the positive pole. The negative pole is connected to metal plate which in turn is bandaged on the arm over several layers of damp cloth. The current is gradually increased to 3 or 4 milliamperes and this current is maintained for 10 minutes. No other treatment or care is necessary.

Granberry's results in chronic Otitis Media as tabulated were:

| | |
|---|----|
| Cases treated | 60 |
| Number dry after from two to seven months | 52 |

There were recurrences in some of these so that he writes his percentage of permanent cures without having to repeat the treatment is 50%.

These ears had discharged for from 5 to 15 years before treatment. (1)

Crosbie in the British Medical Journal reports 248 out of 318 children with chronic purulent otitis media cured. Of the 70 uncured cases 39 were operated upon, 24 left the hospital and the remainder are still under treatment. (3).

Lister found it impossible to use this treatment on children younger than five years of age. (2).

Jobson in the British Medical Journal reports 45 chronic suppurating ears treated in this way; 29 were cured, 13 were not cured, 3 N. R. Of the 29 cured cases two later had relapses. (4).

Smith in the Laryngoscope reports having used this treatment in 20 cases and none were cured. (5).

From the above reports there is evidently a great difference in the results of treatment. The explanation of this is, I think, to be found in the thoroughness or lack of thoroughness in cleaning the ear, not forgetting the attic, before attempting treatment, and the selection of suitable cases.

In the literature on the subject its effect on chronic otitis media alone is mentioned. A friend who has used and written on this treatment for the past three or four years tells me he does not get results in *acute* otitis media with this treatment.

Knowing that others had seen no results in acute cases after the use of this treatment I did not think of trying it myself except on a few cases where I was literally forced to do *something*. These cases turned out so well that I have ceased to worry about how long an adult's ear will *discharge* after I open it. If with the usual care it should threaten to discharge longer than I desire I feel that I can dry it up at any time. And those of you who have watched acute otitis media slowly drag out and become a chronic condition know what a satisfaction this feeling must be. The results from the treatment of the first acute case led me to try it in others, and I will briefly describe this case. The patient was a white adult female, seen with a red bulging tympanic membrane, in one ear, suffering a moderate amount of pain of one day's duration. The membrane was incised and during the following two weeks antiseptics were used. There was no cessation of discharge and the pain in the ear continued to be intense. There were no signs of a mastoid infection. Recalling several *recent* cases where I had ionized *chronic* ears, I used the same treatment on her. The next day she reported an entirely easy night. The ear was dry and in another day the perforation had closed. There has been no further trouble. In acute cases, however, the opening in the tympanic membrane must be large enough to allow the zinc solution to enter the middle ear. I make a practice in these acute cases of changing the zinc solution in the ear after five minutes. If the rate of secretion is rapid the solution will have become milky by the end of five minutes.

The case of the very first patient whose ears I ionized was *very* spectacular in its results. An 8-year-old white girl was brought in with a *foul* discharging ear which had been present *since infancy*. During the seven years many different treatments had been used and none had caused any improvement. A radical mastoid operation had recently been advised and refused. There were no adenoids and the tonsils were apparently free from disease and very small. After repeating the usual medical treatment for otitis media I advised the removal of her tonsils. This was

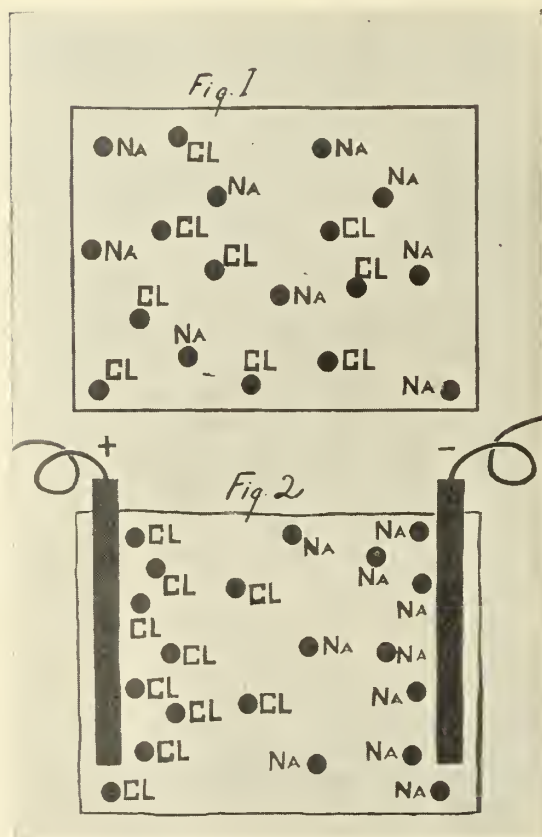
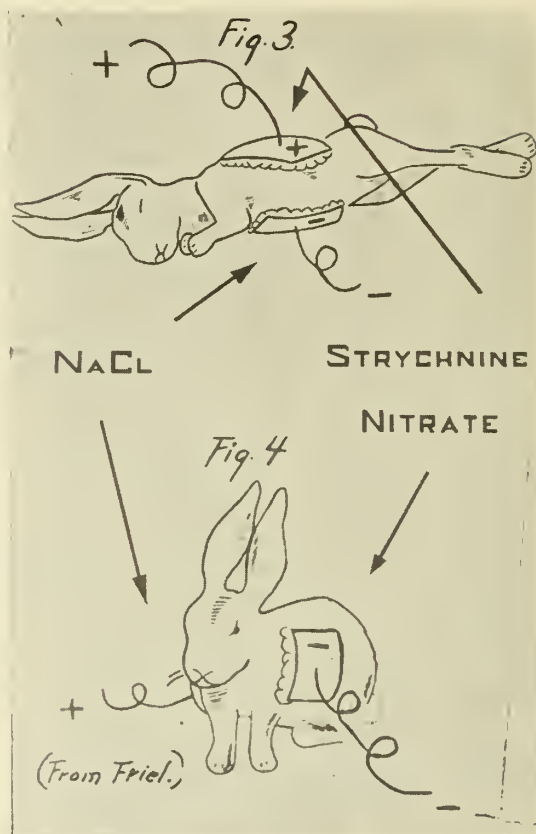


Figure 1

A solution of sodium chlorid. The salt upon dissolving has divided into sodium ions (Na) and chlorine ions (Cl).

Figure 2

The attraction of chlorine ions (Cl) to the positive pole and ions (Na) to the negative pole.



Figures III and IV

The effect on the absorption of poisonous ions. In figure III positive ions are attracted through the rabbit's body toward the negative electrode, resulting in the rabbit's death. In Figure IV positive strychnine ions on the negative pole remain held in place by the negative electrode and the animal is unaffected.

done and was not followed by any improvement. I had heard of the ionization treatment for such cases and in desperation I tried it out. *The next day* the ear was dry and free from odor. The ear continued to remain dry for two weeks. Then I noticed a little mucous in the ear. The *patient* had not detected *any* discharge. I repeated the treatment and there has been no more discharge for almost a year now. The opening found in the drum was too extensive for any hope of closing.

Another case of this class was very interesting in a number of ways. The patient has pulmonary tuberculosis. One ear had discharged since infancy. Upon examination pus was seen exuding from around a polyp the size of a match which protruded through a perforation in the posterior quadrant of the drum. A general anesthetic was very undesirable and ionization was tried

without hope of very good results. The ear dried up and the polyp disappeared after two treatments. Several months later he contracted influenza and the *good ear* became abscessed and was opened and only after about a week did the ear which has been chronically diseased, treated, and cured become infected. Both ears dried up after discharging six or seven days and at the last examination the drum of the ionized ear had healed completely, the perforation had closed and the hearing is perfect.

In the above case the treated ear became infected *long after* the normal ear on the other side.

The effect of the treatment is two fold. There is a disinfecting effect and a shrinking effect on the mucous membrane. This shrinking effect was illustrated by the disappearance of the polyp in the above case. It is also frequently demonstrated by finding the eus-

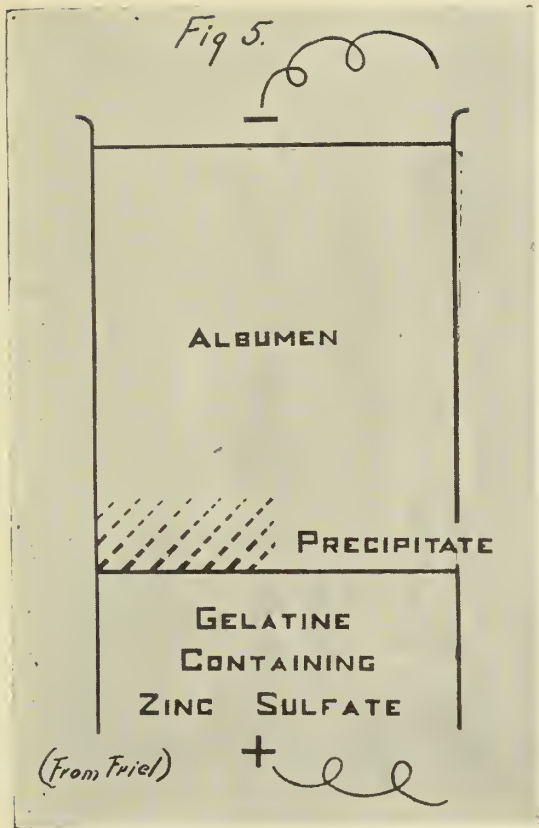


Figure V

The negative pole attracts zinc ions from below into albumen, coagulating it. The depth of penetration of the zinc depends on the time the current is allowed to run.

tachian tube open to air on the day after a treatment. I presume that the mucous membrane at the opening to the antrum is also shrunk. This is one of the most fortunate effects as the mucous membrane of the mastoid aditus is thus opened preventing a stasis and pressure which might result in an acute mastoiditis.

This is illustrated by a recent case. An adult female consulted me for ionization of her ear. The ear had been incised in another city two weeks before but continued to discharge. She was suffering quite a bit with pain over the mastoid process and the amount of discharge from the ear was so great that I felt the mastoid must surely be infected and so informed the patient. She insisted on the treatment however, and as there were no signs of urgency I consented to give the treatment a trial. Next day there was no longer pain over the mastoid process. I repeated the treatment once a week for three times but

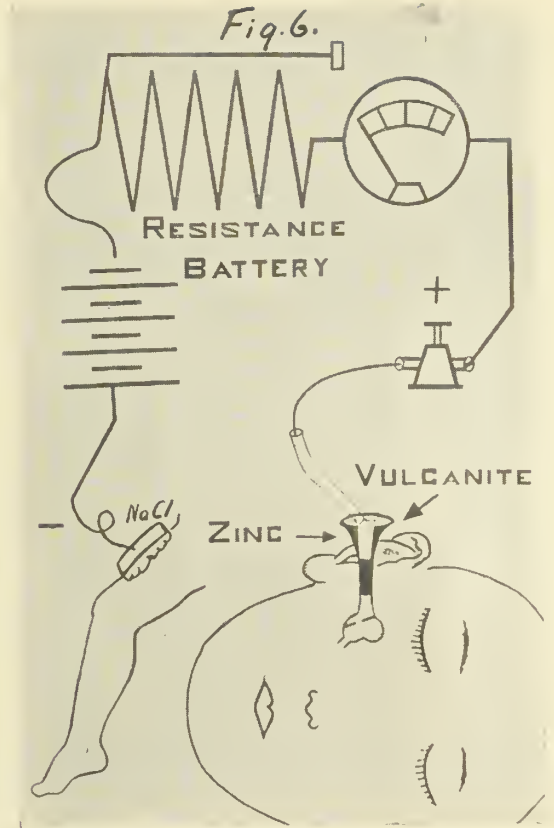


Figure VI

Zinc ionization of the ear. The vulcanite ear speculum contains a solution of zinc sulphate which serves as the positive pole. The negative pole is applied elsewhere in the body.

did not succeed in stopping the discharge. The pain did not reappear for two weeks after the last treatment. I had refused any further treatment other than a mastoidectomy. I then lost sight of her and I presume she returned to her home for the operation.

The third type of purulent otitis media I have treated in this way includes a few patients whose ears continued to discharge after a radical mastoidectomy performed years ago. The cessation of discharge in these cases was very gratifying.

A service to be derived from this treatment is aiding in determining just when a mastoidectomy is necessary to cure a discharging ear. If this treatment fails there need be no further delay. A mastoidectomy may be advised promptly without trying and discarding one treatment after another and running the risk of losing the patient's confidence in the mean time.

I wish to mention a second case in which *failure* occurred. This was a white boy, age 8 years. An acute otitis media developed following a two weeks influenzal infection. The influenza like so many this winter commenced with an acute purulent otitis media, which was promptly drained. The ear discharged while the patient was confined to bed with influenza and for a week after that. Then the zinc treatment was used, but due to the patient complaining, only 1 milliamperes was used in place of 3 or 4 milliamperes, however, on the following day the ear was dry and next day the perforation had healed. The patient was free of all symptoms and discharged. After 4 days he returned with an acute diffuse inflammation of the external auditory canal. A satisfactory view of the tympanic membrane was not obtained. A small gauze drain was inserted and as this seemed to cause excessive discomfort it was removed. Next morning the tympanic membrane was reopened as the temperature was 101 and the patient had spent a restless night. There was very little discharge. By afternoon of this day the temperature was 105 degrees. The posterior wall of the external auditory canal was sagging. There was no swelling over the mastoid and tenderness was not excessive. Upon opening the process a diploic mastoid was found. The antrum contained pus but not under pressure. The diploic bone of the mastoid however *exuded* pus when pressure was exerted with the rongeur in its removal. In this case I believe the ionization opened the eustachian tube sufficiently to allow drainage into the nasopharynx from an infected mastoid process present during the influenza and that finally when the infection came near enough to the dura the headache and fever developed at once. Recovery after the mastoidectomy presented no unusual features.

It is not claimed that this treatment will cure a mastoiditis. However, by using ionization in cases which were not responding to treatment and were rapidly becoming worse it is felt that in several instances a mastoid infection has been avoided. This form of treatment is of course *useless* in the acute otitis cases which are accompanied by

a mastoiditis almost at the same time or right after the otitis media develops. Clinically these patients are cured inasmuch as all symptoms have disappeared. Should there be a recurrence after a year it might mean a lighting up of a dormant infection or a new infection of an ear predisposed to disease by past injury. Dr. Granberry of New Orleans who has used this treatment for the past five years tells me that Dr. Lynch considers most of the good accomplished to be due to shrinking of the mucous lining of the Eustachian tube.

This treatment produces its most constant and spectacular results in *chronic* purulent otitis media but since its *occasional* use in other conditions I have used the title as read.

The title in the program being not strictly true I beg to be allowed to change it as the treatment is not exactly new and yet is still far from universal use.

To summarize: This form of treatment has been used by me in three types of cases, acute purulent otitis media, *chronic purulent otitis media (unoperated upon)* the most important class and as a treatment to follow old mastoidectomies for the purpose of drying up the discharge from the ear. In many cases it was only used after all usual treatment had failed and no improvement apparent or the patients were becoming progressively worse in spite of treatment. In spite of restrictions my results have been good with very few exceptions.

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DISCUSSION ON PAPER OF DR. BLACKMAR

Dr. George T. Olmstead, Savannah: I wish to say that I have had no experience with this type of treatment for purulent conditions in the middle ear, so I cannot speak from experience along this line. Experience has taught us that there are four principles to be observed in treating otitis media: First, drainage; second, aiding the natural resistance of the patient to throw off the infection; third, cleaning away the debris; fourth, med-

ication. I wonder if we can include in one of these classifications ionization. Evidently not, for Dr. Blackmar's claims for this treatment is much more extensive than we had thought possible. The report by Dr. Blackmar does exceed the result obtained by the average otologists, while the report of Dr. Smith as recited by Dr. Blackmar, I think is far below that obtained by the otologists in their routine practice. I think the heat generated by the electric current may be of great assistance. In the bony involvement, such as necrosis, I have not obtained these results. I would like to know whether Dr. Blackmar has such a case. I would also like to know whether zinc solution plus heat from a high-power lamp would produce the similar results. We know the short wave length from the high-power lamp has a better effect than the long wave length from a weak-lamp. It seems to me the degree of heat produced in the ear may be of value rather than the penetration of tissues with zinc solution. Ionization has been a long standing procedure with the dentists. I do not know whether they use it as much as formerly, but it seems here it could be a valuable agent.

Dr. Arthur G. Fort, Atlanta: I have gone into the literature on this subject of the treatment of otitis media purulent by zinc ionization and, find we recognized nine different methods in the treatment of this condition. (1) aeration, or drainage; (2) suction; (3) antiseptics; (4) astringents; (5) heat; (6) ultraviolet rays; (7) vaccines; (8) ionization; and (9) surgery. The fact that we have so many methods, demonstrates that we are far from agreement on the proper thing to do. We do not claim that surgery, particularly the radical mastoid operation, is not indicated in many cases, but we believe that in view of the unsatisfactory results as to hearing and the prevention of chronic discharge, any method which will obviate the necessity for this dangerous procedure is valuable.

The basis on which ionization, or electricity, is used comes from the fact that some substances are electro-negative and some electro-positive, and that where we have substances of less than three valence it will be attracted, but where it goes up to five it is much more difficult to attract them from the negative to the positive pole. Then they become almost negative.

The reason why we use zinc as the positive electrode is because as zinc is driven from the solution into the tissue it is replaced from

the electrode. The dentists have to replenish their iodine when they use this because they cannot have an iodine electrode which will keep the iodine solution up to a uniform strength.

I would like to call attention to the different types of ear conditions which should be taken into consideration in using this treatment, for on the nature of the pathology largely depends the results. In my experience only about five conditions are affected. Tympanic sepsis gives way to this treatment in a wonderful way. On many occasions one treatment will completely dry up the cavity, and rapid restoration of the drum follows. It is true that this condition may also be relieved by "drops" but why use them over a long period of time when one treatment will suffice? Tympanic infections with polypi, or granulations, are often cured, provided the polypi or granulation tissue are first removed. Tympanic infections with caries are benefited but before cure is obtained the necrotic bone has to be removed. When tympanic sepsis is associated with simple infection of the Eustachian tube the condition is greatly benefited. Where there is an associated infection of the tonsils, adenoids and sinuses, this condition should be removed before treatment is applied. Tympanic sepsis with furunculosis of the external auditory canal offers an ideal condition for zinc ionization. In cases of tympanic sepsis associated with chronic mastoiditis with cholesteatoma the odor is lessened but condition not cured. After the mastoid is opened and the cholesteatoma removed this treatment is of value.

I wish to thank Dr. Blackmar for this contribution.

Dr. Harold L. Warwick, Ft. Worth, Texas: I have been using this treatment in chronic otitis media for several years. I have in mind a prominent attorney of Abilene who came in with a chronic running ear. He said he was 62 years old and that the ear had been running for sixty years. The last time I saw him the ear had been dry following one zinc ionization treatment. In using this treatment I have never found it necessary to use cocaine in the solution, or to use anything but the zinc solution. I find the 1 per cent zinc sulphate solution quite effective, and I find the motor generator more effective than the battery. I think this produces a direct anesthesia that is not obtained with any type of battery. I find the positive pole from the motor generator satisfactory. For tympanic sepsis, pure and simple,

I think the zinc ionization is one of the best methods of treatment. It is surprising to find how often it will prevent operation. I am also using this method in the treatment of rhinitis, with equally successful results.

Dr. George Henry Faggart, Savannah: I think we often claim credit for curing conditions which nature takes care of. The mention of the lawyer to whom Dr. Warwick referred brings to mind the case of a man in Savannah who had a running ear for forty years. He came to me and I did not do him any good. He came back three years afterwards and told me he had had a tooth pulled and that the ear became dry, and it has remained dry for six months. I think ionization has a place, especially in the treatment of chronic otitis media, but I think its value is probably over-stressed.

Dr. Francis B. Blackmar, Columbus: I wish to thank the gentlemen for their discussion, and to say one other thing which I had in the paper that I did not bring out. That is, the great service that we can give to a patient with a discharging ear. We can give them "drops" but they usually say that such treatment has never done them any good. If you use ionization and cure them, all right; if not, you can then advise a radical mastoid operation. I think if a patient has had a discharging ear for from forty to sixty years that nature could hardly stop that discharge. I have only used this method after the usual treatment has failed. No patient of mine has ever complained of the heat, although there is some little discomfort. I use adrenalin and cocaine to stretch the mucous membrane and shrink it up, and make it as smooth as possible, so that there will be as intimate contact as possible between the solution and the mucous membrane.

GEORGIA BABY BOOK

The last edition of 30,000 copies of the Georgia Baby Book has been exhausted. The fourth edition is now in the hands of the printer. It has been completely revised, with a number of additions and improvements. Fifty thousand copies will be printed. If you ask for a baby book do not get impatient; it will be mailed you just as soon as possible.

—GEORGIA'S HEALTH,

November, 1928.

FECAL FISTULA, PERITONITIS, INTESTINAL OBSTRUCTION AND ENTEROSTOMY

B. T. BEASLEY, M. D.
Atlanta

"A fecal fistula is an artificial communication which exists between the intestinal canal and the skin and through which only a minor portion of the fecal contents pass, the major portion passing past the opening through the normal channel; as differentiated from an artificial anus in which condition obstruction exists in the intestinal canal below the opening and all, or the major portion, of the contents of the bowel passes through the unnatural opening of the skin.*"

"The causes of fecal fistula may be, (a) disease causing ulceration of the bowel wall, (b) operation, (c) wounds, (d) congenital causes."*

There are four chief forms of fecal fistulae. (1) The bowel is not bent upon its self to any extent; there is no spur; but little of the intestinal wall is involved; the opening is small; the skin and intestinal mucosa are connected by a sinus like communication of greater or less length. (2) The bowel is bent some what more upon its self; more of the intestinal wall has been lost; the opening is larger; there is no distinct spur but a tendency to one; the bowel does not tend to prolapse; the fistulous opening is larger and shallower; the skin and intestinal mucosa are more nearly in contact, and may be in direct communication with each other; there is no fistulous tract. (3) The bowel is more acutely bent upon its self; a marked spur is present reaching approximately the skin level. The characteristics of this form is the pronounced and prominently projecting spur. (4) The bowel is not diverted from its usual course and is not attached to the abdominal wall but a fistulous tract communicates between the surface and the bowel by a rather prolonged tract.

The case which I am about to report bears some of the characteristics of forms two and

*See Bickham's surgery for definition, description and classification of fecal fistulas.

three. There was no spur, the skin and intestinal mucosa were practically in contact; the mucosa everted; there was no fistulous tract; the proximal and distal limbs were firmly adhered to a second and third loop of bowel above and below. These two loops approached the opening at acute angles, the upper practically obstructing the fecal contents through the fistula, while the lower loop obstructed the flow below the fistula.

Mrs. K., Married, aged 26, the mother of two living children, was operated four months ago, for acute appendicitis ruptured with abscess formation and fecal pocket at the distal end of the appendix. Following this operation she had general peritonitis, intestinal obstruction and an enterostomy. She left the hospital at the end of three weeks and re-entered three months later with partial intestinal obstruction. There was a large excoriated area around the fistulous opening, the bowel was practically completely obstructed but after a few high enemata and hot applications to abdomen, her bowels began to act through the fistula and through the natural channel. Her condition continued to improve and she was operated ten days later.

Operation: Wound was prepared preliminarily as follows: Sponges soaked in 1% mercurochrome were applied to the excoriated area and changed every two hours for twenty-four hours, the abdomen was cleansed with bezine and warm water and green soap two hours before going to operating room. A fresh dry dressing was applied at 9:30 A. M. She was given morphia gr. 1-6 at 6 A. M. and gr. 1-8 at 9:30 A. M. and an O & G enema at 8 A. M. The raw surface was painted with pure carbolic acid, and alcohol applied. A small packing was placed in the fistulous opening. The raw surface was excised and the edges everted and sutured over the packing. The peritoneum was excised and the mass circumscribed by the exploring finger and the incision extended around the mass until the entire area was cut away. The mass composed of omentum, the three loops of intestines and excised raw surface was lifted out of the abdomen and surrounded with gauze pads. The loops of in-

testines were freed from each other and omental attachments, and peritonized. The excised mass was separated from the bowel and the fistula closed with a purse-string and Lembert stitches. The intestines were replaced and the abdomen closed without drains.

It is not the purpose of this report to elaborate upon the treatment of fecal fistulae. It might be mentioned, however, that while most fecal fistulae heal spontaneously, occasionally surgical intervention has to be resorted to and each case has to be dealt with according to the type of fistula, the condition of the patient, and the judgment of the operator. In the absence of massive adhesions, acute angulations or obstruction, partial or complete, above or below the opening, the extraperitoneal or plastic method may be employed. In the presence of such complications, as this case presented the intraperitoneal or radical course should be followed.

RADIO WAVES

Second Edition

"Your Medical Society helps to keep you 'up-to-date'."—Sharp.

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"Nothing can be done yesterday; be on the job today."—McCurry.

"We should not only take from medical science, we should give to it."—Roberts.

"Study, ponder, act."—Clark.

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"Help your neighbor; help yourself."—Redfearn.

"Step on the gas of friendship and inspire others to climb the hill of 1929."—Moore.

"Give to your medical associations the best you have and the best will come back to you."—Roberts.

THE JOURNAL

OF THE

MEDICAL ASSOCIATION OF GEORGIA

Devoted to Welfare of Medical Profession of Georgia

139 Forrest Ave., N. E., Atlanta, Ga.

DECEMBER, 1928

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Articles are accepted for publication on condition that they are contributed solely to this Journal.

Manuscripts should be typewritten, double-spaced, and the original (not the carbon copy) submitted. Used manuscript is not returned unless requested.

Communications and items of general interest to the profession are invited from all parts of the State. We especially invite county society secretaries to send us information of happenings in the county that would be of interest to the members throughout the State.

Reprints should be ordered within 30 days after the appearance of an article, since all type will be destroyed at the end of that time.

Editorial Department**THE SEASON'S GREETINGS**

To each and every member of the Association we extend sincere greetings and best wishes for a Merry Christmas and a Happy New Year. May God's choicest blessings be showered upon you and yours during this Yuletide Season.

THE DIRECTORY ISSUE

In this, the directory issue of the Journal, will be found a complete list of members of the Association who have paid 1928 dues up to December 15th. No effort has been spared to make it both complete and accurate. The list for each county society was sent to the secretary for his corrections and approval before publication. There should be no errors but if such occur, please notify the Secretary-Treasurer immediately.

**ANNUAL DUES FOR 1929 ARE
PAYABLE JANUARY FIRST**

*To the Members and Eligible Non Members
of the Medical Association of Georgia:*

This is wishing to each and every one a joyous and happy Christmas season and a prosperous New Year. Let us go forward into another year filled with optimism and with uplifted faces to enable us to see the silver lining which assures us that the sun of better times is shining behind the cloud of adversity of the present year.

The Medical Association of Georgia is a great and useful institution and its influence is growing apace with the years, and our first thought should be our beloved Association and its welfare. Let us, every one of us, at least pay our dues to the County Society Secretary for membership in the State and County Medical Societies, and then get in the habit of attending the meetings of these Societies; you will soon become interested, then active, and the small sum paid as dues will be repaid many times by the benefits received.

A physician with whom I am personally acquainted and a fine man and physician, was confronted with a damage suit; he awoke to the fact that he was not a member of the Medical Association of Georgia, much to his discomfort. Fortunately, the suit resulted in his favor. Needless to say, he realized his error and forthwith paid his dues, and has been an active member ever since. Much of the necessary worry would have been avoided had he not neglected this prime duty, and the moral support of the membership and the financial support of the State Association would have been with him.

In 1927 an aggregate of \$279,500 in suits was brought against members of the Medical Association of Georgia, resulting in not a verdict for the plaintiff in any case. This speaks volumes for our excellent staff of lawyers. Now, let every one of us see to it that our names are enrolled on or before January first, 1929.

Here's for membership of 2,000 for 1929.

Fraternally,

C. K. SHARP, M. D.,

PRESIDENT.

ADVENTURES IN DIETETICS

Under the above title Dr. William Brady, in the Atlanta Constitution of November 27, discusses "food fakers." He states, "If the medicinal nostrum is doomed to fade from public view its passing is no compliment to popular intelligence. The cure-all has been removed from the parlor table to the cupboard in the woodshed mainly because its fond patrons could not stand ridicule. In a great many homes where this reform has been brought about the quondam customer of pills and potions now turns to other diversions and sooner or later the reformed medicine sampler is pretty sure to be intrigued by the plausible fallacies of the food sharpeners. Intrigued is the exact word; I mean deceived. The patent medicines in all their glory never hoodwinked people more completely than these dietetic charlatans and so-called health foods are fooling the wise ones today. Reveal to the untutored layman the fact that fourteen elements are essential for the proper nutrition of man and you can sell him a package of bone meal or ground gravel at almost any price. Or put your stock up in pill form, tell the customer it is essential that the fourteen elements be combined in just the right proportions, the secret of the correct combinations being the private property of a few mail order concerns, and your fortune is assured.

"Indeed the nostrum and quackery trade is far greater now than ever before, only it is in foods rather than medicines."

We wish to commend Dr. Brady for his intelligent discussion of this new form of quackery. It is a growing menace. Barnum, in all of his glory never put forth any more extravagant statements than those being made daily to the public and our patients by the multitudinous "food fakers." One of the most deplorable features of this exploitation is that some of our leading department stores are aiding and abetting the movement by widely advertising the so-called food demonstrations.

Again we commend Dr. Brady for his intelligent and fearless exposure and the Constitution for having so able a writer on medical topics.

THE SAMUEL WALLACE WELCH
MEMORIAL SCHOLARSHIP
FUND.

The friends of the late Dr. Samuel Wallace Welch, former State Health Officer of Alabama, have organized the Samuel Wallace Welch Memorial Scholarship Fund, the income from which shall be devoted to providing scholarships and loans to deserving students to equip them for the practice of medicine. The Fund will be administered by a Board of Trustees chosen for life, serving without compensation. The Birmingham Trust and Savings Company, Birmingham, Alabama, will act as executor of the fund, making payments out of the annual income as authorized by the Board of Trustees and have agreed to serve in memory of their friendship and association with Dr. Welch:

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Subscriptions should be made payable to S. C. Oliver, Chairman, Talladega, Alabama. They will be taken in amounts of \$100.00 or more and may be paid in cash or in semi-annual or quarterly installments, payable within one year.

We are very happy to lend our assistance to the establishment of this Fund since under the able leadership of Dr. Welch the state of Alabama was brought to first rank among all the states in public health service. In addition to commemorating the memory of one who did so much for Alabama and the South this fund will go on helping fill the ranks of the medical profession with worthy representatives for many, many years to come.

THE MEETING OF THE COUNCIL

On October 17, 1928 the Council met at the office of the Association, 139 Forrest Avenue, N. E., Atlanta, Georgia, and was called to order by the Chairman, Dr. M. M. Head. Those present were: Drs. W. H. Myers, J. A. Redfearn, G. Y. Moore, O. W. Roberts, E. C. Thrash, M. M. Head, M. M. McCord, H. M. Fullilove, C. L. Ayers, S. J. Lewis and A. S. M. Coleman—representing the First to Eleventh Districts respectively, and Dr. C. K. Sharp, President, Dr. W. R. Dancy, President-elect, Dr. C. Thompson, Vice Councilor First District, and Dr. Allen H. Bunce, Secretary-Treasurer. Only one district was not represented—the Twelfth.

The minutes of the previous meeting were read and adopted. A report on the conditions in their respective districts was made by each councilor present. At the conclusion of their individual reports Dr. M. M. Head, the Chairman, urged everyone present to make all possible efforts to collect dues from delinquent members and enroll all remaining eligible physicians in the state in their respective county societies.

Dr. E. C. Thrash, Chairman of the Publication Committee of the Council, reported that his committee had let a new contract for the publication of the Journal for the next 12 months, beginning with the September issue, by which a considerable saving to the Association was effected and in addition to this the committee secured a definite contract for the printing of reprints whereby individual members desiring reprints will know in advance the exact cost which will be considerably cheaper than in the past. The Council approved the action of this committee and thanked it for its efficient work in behalf of the Association.

On account of sickness of members and their families a meeting of the Committee on Medical Defense has not been held for some time, and since some important matters are pending which require action by this committee Dr. E. C. Thrash was requested to get in communication with Dr. M. A. Clark, the Chairman, and request that some action be taken upon the pending matters.

Dr. Theodore Toepel, Chairman of the Committee on Health and Public Instruction, addressed the Council and re-read the recommendations of his Committee which were adopted by the House of Delegates at the Savannah session of the Association. He asked for appropriations for the printing of ten thousand health examination blanks and also for funds for making a survey of the mid-wife situation in Georgia. This appropriation was refused at the Savannah session because of a lack of funds in the treasury and was again refused at this meeting for the same reason. However, the Secretary-Treasurer was requested to publish a copy of the health examination blank in the Journal, quoting prices for the blanks and was requested to have these printed in sufficient numbers to supply orders of the individual members of the Association.

The Secretary-Treasurer made a report of the financial condition of the Association and the present status of its membership which is larger than any previous year to this date. Notwithstanding this increased membership, there is in the treasury over a thousand dollars less than last year at the same time. If this condition continues it will be necessary either to raise the annual dues or to omit some of the present activities of the Association.

President-elect W. R. Dancy and President C. K. Sharp gave very interesting and instructive talks on the work of the Association. They both strongly advocated re-introduction of the Basic Science Bill at the next session of the General Assembly.

Dr. W. H. Myers spoke of the necessity for a law in Georgia to shield the physicians of the state from being forced to divulge in court confidential communications of their patients.

Dr. M. M. McCord told of the efforts being made in the Seventh District to acquaint the members of the General Assembly with the Basic Science Law by inviting them to the various medical meetings in the District.

There being no further business the meeting adjourned.

M. M. HEAD, Chairman,
ALLEN H. BUNCE, Secretary.

THE HENRIETTA EGLESTON HOSPITAL FOR CHILDREN

The following communication from Mr. W. R. Prescott, Chairman of the Board of Trustees, of the Henrietta Egleston Hospital for Children, 640 Forrest Road, N. E., Atlanta, Georgia, is self-explanatory:

The Board of Trustees of the Henrietta Egleston Hospital for Children take pleasure in extending to you the facilities of this institution in the care of your patients. Any child from birth to the age of twelve years is eligible for admission save those suffering with acute contagious diseases.

The Hospital, made possible through the generosity of the late Thomas Egleston, has for its purpose service to the community in caring for the sick child. In its construction beds have been provided for forty-two free patients who will be cared for free of charge in every respect by the hospital and by the medical staff appointed by the Board of Trustees. Eight private rooms are available for the treatment of patients of any physician in good standing in the community. The attempt has been made to make the facilities for the treatment of infants and children in every detail.

There is a fully maintained clinical laboratory and X-Ray department. The surgical suite is equipped to efficiently handle all cases requiring operative treatment. The milk laboratory is ready to prepare all types of formulae usually required for the infant, both sick and well. This service is available not only for the patient in the Hospital, but for the child at home should such be indicated and prescribed by the physician.

Feeling the need of a constantly available breast milk supply in the city, there has been instituted in connection with the milk laboratory, a breast milk station where this product may be obtained at a reasonable figure. Such service must of necessity be a considerable expense to the Hospital, but we believe the benefit derived will be worth the expenditure and we hope ultimately that the station will be self-supporting.

Special provision has been made for the care of the premature infant.

The mother of a private patient will be allowed to remain in the Hospital with her child.

We have delayed extending you this invitation until an adequate staff of nurses and other employees were obtained and until we were assured that the Hospital was prepared to afford excellent service.

You are cordially invited to visit the institution and to avail yourself of its facilities.

W. R. PRESCOTT,

Chairman, Board of Trustees.

In many respects this is the most interesting hospital in our state. Its construction, equipment and personnel are the best. We predict for it a wonderful future of valuable service, and suggest that our members and

their wives and families avail themselves of the earliest opportunity to visit this truly wonderful institution.

GEORGIA'S MEDICAL COLLEGE

"I wish to congratulate The Atlanta Georgian with all my heart upon the excellent and timely editorials it has carried of late weeks advocating increased support for the medical department of the University of Georgia in Augusta," said former Governor Hugh M. Dorsey to this writer at Major Cohen's luncheon to Governor Smith at East Lake on Monday. "I have, through official observation and otherwise, good reason to know that you are entirely right and rendering a constructive public service in calling upon the Legislature to maintain this institution as it so richly deserves. It is rated today as one of the 'A-1' medical schools of the United States; its graduates are accepted into the profession in good faith and without question. Georgia is entirely dependent upon the splendid medical college at Emory and the one in Augusta to keep the state sufficiently supplied with medical graduates to take the place of the doctors who pass out of the profession every year; as a matter of fact, as you have repeatedly stated, they annually are passing out of the practice in Georgia in larger numbers than they are being graduated by these two fine schools. The City of Augusta stands staunchly by the institution; its city hospital is under the very efficient direction of the same—a tip for other cities situated so as to consummate a similar arrangement. Georgia has a very valuable and high-class asset in this institution at Augusta!"

While the writer was discussing the medical college of the University of Georgia with former Governor Dorsey, Governor Hardman joined us and gave instant indorsement and approval to what Governor Dorsey was saying. "Naturally," said Governor Hardman, "I have an affection for the medical college at Augusta; I graduated there myself and it has been close to my heart all these years. Its standard is far, far higher today than it was in my time; as is the case, of course, with all of the really high-class medical colleges of the country. I attended commencement

there last summer, not only in my official capacity, but as a personal satisfaction. I was gratified and, in some ways, astonished at the splendid status of the institution; it has a wonderful faculty and is being ably, conscientiously and efficiently conducted. Judge Enoch Callaway, as chairman of the board of directors, gives it much of his time and has been a tower of strength to it. The last Legislature did give the college some additional assistance—very wisely, I think, as I so suggested. The graduating class of last summer impressed me profoundly; I don't know when I have seen a body of young men go forth better equipped for service. Georgia should be proud of its medical college and should give it all of the aid and comfort Governor Dorsey mentioned."

—PEOPLE AND THINGS

By J. B. N., Atlanta Georgian,
November 28, 1928.

DEATHS WITHOUT MEDICAL ATTENDANCE.

One of the most distressing situations in our State today is the great number of people who die without ever having the care and attention of a physician. In this day of enlightenment and mechanical conveniences it seems incredible that there should be conditions which would permit a human life to be extinguished without an effort being made to save it through modern medical science. Yet in 1927 there were 3,215 deaths without medical attention. When it is considered that this represents one death out of every hundred, and that many of these lives could, no doubt, have been saved with proper medical attention, it presents a most deplorable plight.

The three principal causes are, probably, lack of sufficient number of doctors in rural districts, ignorance, and depressed economic conditions which prevail in our rural sections. The causes should be ascertained and then an effort made to correct this pitiful and deplorable condition of our people.

—GEORGIA'S HEALTH,

November, 1928.

PACKAGE LIBRARY SERVICE

To the Editor:

You asked me recently to give you some idea of our requirements in carrying on the Package Library Service to the medical profession in this State.

The American Medical Library Association Library, which I visited last month, has two full time assistants working with their package library material and they receive an average of 20,000 reprints and periodical articles a year. This material is retained for a five-year period, articles over five years old being discarded. A current file is therefore maintained of 100,000 articles classified and available for loan.

Of course we do not aim to give as comprehensive service as the A. M. A., but to give satisfactory service to the doctors of the state, I think we will require the services of a person with a good knowledge of medical and library classification. Such a person working for part time—by the hour, I would suggest—should be able to classify and file the material according to the Quarterly Cumulative Index classification. Actual distribution of the packages can be handled by this library.

We have already accumulated a large collection of reprints, and require for their filing at least two or three vertical file cases. Press board folders and guides for these cases would be needed. To carry on we will need also several thousand more form post-cards for requests and acknowledgements. I am enclosing samples of these cards and also samples of the rules, labels, announcements, etc., which were recently printed. (See October, 1928 Journal, p. 473).

I am always glad to co-operate with the Medical Association of Georgia, to make our medical library and medical literature serviceable to the doctors of the state.

M. MYRTLE TYE,
Librarian, A. W. Calhoun Medical Library.

RESOLUTION GEORGIA PRESS ASSOCIATION.

Whereas, members of the Georgia Press Association in called meeting in Atlanta on

Saturday, December 8, profited greatly from a program provided by officers and members of the Georgia State Board of Health looking to the elimination of malaria in the infested areas of the state; and

Whereas, Dr. Abercrombie, Dr. Winchester and their associates have already initiated a statewide program looking to the final elimination of malaria in Georgia with the State Board of Health directing the vitally important work; and

Whereas, we, the members of the Georgia Press Association, realizing the great need of statewide newspaper support and promulgation of this campaign against malaria that the suffering public may realize more fully the acute status and assume individual responsibility in helping to rid Georgia of malaria are

Resolved, first, to thank the officers and members of the Georgia State Board of Health for the program which they provided for our press meeting in Atlanta to disseminate among us the greatly needed information which was so effectively placed before us; and

Resolved, further that the officers and members of the Georgia Press Association individually assume the unselfish and important duty of full cooperation wherever it is possible to use our publications in the cause to aid in reaching the public with the information so badly needed by the people in the areas affected by malaria.

CHARLES E. BROWN
JACK WILLIAMS
CHAPMAN

Committee.

RESOLUTIONS PASSED AT MALARIA CONFERENCE HELD IN WAYNES- BORO, NOVEMBER 20, 1928.

Educational Program:

1. Create interest in county medical societies in establishing the Ellis Health Law in malaria belt with malaria control as chief objective.

2. Formation of Malaria Control Commission to cooperate with county board of health in every county in malaria belt.

3. Request each county medical society at January meeting to make malaria control chief subject for discussion.

4. Conference to be called composed of newspaper editors throughout the state with State Health Officer.

This Committee Recommends:

(a) Malaria control education.

(b) That all known cases occurring during past season, wherever possible, be given 8 Week Standard Quinine Treatment.

(c) That all houses be screened with sixteen mesh screening.

(d) That all known mosquito control methods be practiced by malaria control commission of each county.

(e) That counties operating under Ellis Health Law, county health officer be chairman of county malaria control commission.

(f) That the State Board of Health be requested to furnish detailed plans that can be followed by the county malaria control commission in each county.

RADIO WAVES

(Continued from Page 547)

"Wisdom is a loan from God to be repaid in service to his creatures."—Thrash.

"Nothing is better or more helpful in the medical profession than brotherly love."—Head.

"Personal: If every other physician was just like you, would the Medical Association of Georgia be moving forward or backward?"—McCord.

"Skill, sympathy, understanding—seek these things."—Fullilove.

"Regardless of our inclinations or disinclinations, we can not escape our responsibility to politics and legislation."—Ayers.

"Our objective should be not to do the best that we can do, but to do the best that can be done."—Lewis.

"Live to strive; strive to attain; attain the heights."—Coleman.

"Let 1929 be county hospitalization, to do better prenatal work in 1929."—Wall.

OFFICERS

Treasurer.....Miss Jane Van De Vrede, R.N.
105 Forrest Ave., N.E., Atlanta

"In the old and cumbersome organization we could leave much to the permanent members. We had the financial support of nurses who had left our states but still cast their lot and their vote in the American Nurses' Association with the home guard. Not so today! We come into the A. N. A. now as a resident or as a non-resident of our Alumnae Association. The wider the influence of our training school and alumnae, the more credit we should have for country wide work. Had you ever thought of it? The graduate of your school—a non-resident Alumnae—is helping to carry on a state association somewhere else! She may be its president. What inspiration your association can draw from that fact! What an interesting history it would make if you kept it for your training school library and in turn for the students who come into the school. And what a constant spur to the member who has gone out of her home state to feel that she is followed by her associated successors. She will be strengthened and comforted by this knowledge when she faces dis-

couragement and failure, and be more joyful in the knowledge when she is successful!

"Non-resident members should be made to feel they are envoys, carrying the spirit of their training and that of their associates afar.

"But what of those who remain near to their 'Alma Mater' and practice their profession oftentimes within her walls? They must be the bulwarks of the organization. We have often heard 'In union there is strength' and have even realized that the saying has been much abused, because the team has grown to mean one strength as opposed to another. Unity does give strength, but it must come from a real knowledge of the aims and purposes of organization, and a perfect understanding and acceptance of our part in its progress. We must accept it from the time we enter the training school. If we do, there will be no fear of our neglect of duty in the alumnae association!

Objective

"The real objective should center around the interest and challenge the personal service of the members. Scientific demonstrations would interest all and be instructive to the older nurses, who have not perhaps been able to keep up with the newer methods. A one-day institute could be held each year at graduation time, to inspire and keep the older nurses abreast of nursing progress. The study of parliamentary procedure is greatly needed in all our association work. There is no better or easier place to begin it than in the alumnae association, where we all know each other well and where our problems are for the most part simple ones.

"Not only do we owe a responsibility to our association as it fits into the scheme of our organized profession, but we owe a deeper obligation to its future members; that is, to the school itself, to which we owe our connection with any alumnae or nursing organization from the least to the greatest.

"Do we, as alumnae of our school, know what is being taught and practiced within its walls today? Do we consider our own professional skill and conduct in the light of their effect upon that school? Do we interest ourselves in getting the best superintend-

ent and assistants possible? Are we willing to prepare ourselves for positions of trust and usefulness in the interests of our school? Are we willing to meet emergencies to keep its standards high and its service perfect and complete? Standards and service cannot be maintained or rendered by accepting them for others. They must be applied by each member for herself.

Accomplishments

"I scanned the pages of the *American Journal of Nursing* for a period of two years to note what alumnae associations had done. I looked through other periodicals and alumnae association reports, articles, etc. I found a great many things worth while being done. Many of them could be duplicated by our organizations even when quite small.

"Publishing reports, pamphlets, year books and special historical outlines, and sometimes selling them to friends; giving entertainments, plays, moving pictures, etc.; raising sick benefits, outfitting hospital rooms, nurses' sitting rooms, libraries, lecture rooms; preparing exhibits for schools, etc. Providing lecture courses on special subjects not in the regular curriculum. This might be a joint enterprise of all the alumnae associations and might cover subjects on art, music, literature and other cultural subjects. Hospital, Red Cross, special emblems and American flags could be made. Service to tuberculosis patients could be given; to the mentally ill. This could include occupational therapy. Memorial funds of any nature could be fostered. As I have mentioned these, other things I know have come into your minds. There is, in fact, no actual limit to the usefulness of the alumnae; but the close relationship of the members, one to another, is after all the most important and far-reaching contribution to and through the alumnae in its effect upon the individual and upon the profession as a whole.

The Florence Nightingale Pledge

"The history of the nursing profession is replete with wonderful examples from her in whose memory and honor Mrs. Gretter, a worthy follower, gave us the searching yardstick of the Florence Nightingale pledge:

(Continued on Page 562)

District and County Societies

DISTRICT OFFICERS

FIRST DISTRICT

President Myers, William H., Savannah
 1st Vice-Pres. Elarbee, Geo. W., Daisy
 2nd Vice-Pres. Ezell, Howard E., Oliver
 Sec'y-Treas. Long, Wm. V., Savannah

SECOND DISTRICT

President Chason, Thomas, Donalsonville
 Vice-Pres. Sanchez, S. E., Barwick
 Sec'y-Treas. Watt, Chas. H., Thomasville

THIRD DISTRICT

President Lunsford, G. G., Cordele
 Vice-Pres. Daves, V. C., Vienna
 Sec'y-Treas. Greer, Chas. A., Oglethorpe

FOURTH DISTRICT

President Clark, W. H., LaGrange
 Sec'y-Treas. Callaway, Enoch, LaGrange

FIFTH DISTRICT

President Fort, A. G., Atlanta
 Vice-Pres. Camp, R. T., Fairburn
 Sec'y-Treas. Evans, J. R., Decatur

SIXTH DISTRICT

President Miller, G. T., Macon
 Vice-Pres. Hunt, K. S., Griffin
 Sec'y-Treas. Thompson, O. R., Macon

SEVENTH DISTRICT

President Harbin, R. M., Rome
 Vice-Pres. Wood, C. V., Cedartown
 Sec'y-Treas. McCord, M. M., Rome

EIGHTH DISTRICT

President Carter, D. M., Madison
 Vice-Pres. Gholston, W. D., Danielsville
 Sec'y-Treas. Gerdine, Linton, Athens

NINTH DISTRICT

President Coker, Grady N., Canton
 Vice-Pres. Neal, L. G., Cleveland
 Sec'y-Treas. Bennett, J. C., Jefferson

TENTH DISTRICT

President Cranston, W. J., Augusta
 Vice-Pres. McGahee, R. C., Warrenton
 Sec'y-Treas. Phinizy, Irvine, Augusta

ELEVENTH DISTRICT

President McMichael, J. R., Quitman
 Vice-Pres. Fleming, Albert, Folkston
 Sec'y-Treas. Reavis, W. F., Waycross

TWELFTH DISTRICT

President Franklin, R. C., Swainsboro
 Vice-Pres. Edmondson, J. W., Dublin
 Sec'y-Treas. Cheek, O. H., Dublin

1928 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 20, 1927.
2. Turner County, Dr. J. H. Baxter, Ashburn, November 15, 1927.
3. Terrell County, Dr. Logan Thomas, Dawson, December 1, 1927.
4. Pike County, Dr. M. M. Head, Zebulon, December 3, 1927.
5. Ben Hill County, Dr. L. S. Osborne, Fitzgerald, December 8, 1927.
6. Evans County, Dr. S. T. Ellis, Claxton, December 20, 1927.
7. Taylor County, Dr. J. C. Hind, Reynolds, January 3, 1928.
8. Jasper County, Dr. E. M. Lancaster, Shady Dale, January 6, 1928.
9. Talbot County, Dr. C. C. Carson, Talbotton, January 28, 1928.
10. Wayne County, Dr. M. N. Stow, Jesup, February 9, 1928.
11. Elbert County, Dr. B. B. Maddox, Elberton, March 1, 1928.
12. Lamar County, Dr. Jno. M. Anderson, Barnesville, March 6, 1928.
13. Terrell County, Dr. Logan Thomas, Dawson, March 7, 1928.
14. Stephens County, Dr. C. L. Ayers, Toccoa, March 8, 1928.
15. Upson County, R. L. Carter, Thomaston, March 15, 1928.

16. Crisp County, Dr. J. N. Dorminy, Cordele, April 5, 1928.
17. Henry County, Dr. H. C. Ellis, McDonough, April 10, 1928.
18. Dougherty County, I. M. Lucas, Albany, June 6, 1928.
19. Dooly County, Dr. F. E. Williams, Vienna, June 29, 1928.
20. Macon County, Dr. C. P. Savage, Montezuma, June 29, 1928.
21. Stewart-Webster Counties, Dr. J. M. Kenyon, Richland, June 29, 1928.
22. Sumter County, Dr. Henry R. Smith, Americus, June 29, 1928.
23. Emanuel County, Dr. R. C. Franklin, Swainsboro, July 3, 1928.
24. Rabun County, Dr. J. A. Greer, Clayton, September 18, 1928.
25. Forsyth County, Dr. Marcus Mashburn, Cumming, October 27, 1928.

DISTRICT HONOR ROLL

1. Third District, Dr. G. Y. Moore, Councilor, Cuthbert, June 1, 1928.

1929 HONOR ROLL

1. Randolph County, Dr. G. Y. Moore, Cuthbert, September 6, 1928.
2. Stewart-Webster Counties, Dr. J. M. Kenyon, Richland, November 12, 1928.
3. Pike County, Dr. M. M. Head, Zebulon, December 1, 1928.

4. Dougherty County, Dr. I. M. Lucas, Albany, December 18, 1928.

NEW MEMBERS 1928

Artega, Oliver, Atlanta.
 Blanchard, Mercer, Columbus.
 Bonner, Lila M., Atlanta.
 Dunston, E. M., Atlanta.
 Dykes, J. R., Cairo.
 Elkin, Arch, Atlanta.
 Floyd, C. F., Columbus.
 Gans, C. C., Fort McPherson.
 Gardner, W. A., Stone Mountain.
 Herrot, George W., Jr., Atlanta.
 Holden, F. C., Atlanta.
 Ivey, John C., Atlanta.
 Kiser, W. H., Jr., Atlanta.
 Mosteller, Malcolm, Millen.
 Pennington, J. H., Columbus.
 Porch, Leon D., Macon.
 Russell, Ralph E., Atlanta.

SECOND DISTRICT MEDICAL SOCIETY.

Camilla, Georgia, October 12th, 1928

Meeting was called to order at ten fifteen (10:15) by the President, Dr. Tom Chason.

Invocation by Rev. A. M. Mitchell, Camilla, Ga. The address of welcome was delivered by Congressman E. E. Cox, with a eulogy upon the medical profession; he commended it for its advancement and ideals and welcomed the society in behalf of the local profession and the citizens of Camilla. Dr. Tom Chason, President of the society, in a few words thanked Judge Cox and the people of Camilla for their cordial welcome.

The secretary read the minutes of the last meeting which were approved as read.

Scientific Program

The first paper on the program was entitled "Glaucoma" by Dr. Albert S. Bacon, Albany, Georgia. The writer, by way of introduction, stated that his reason for presenting this paper was because in the past month six cases came to him for treatment of glaucoma, as a result of having had atropin in the eye. The paper was discussed by Dr. King of Thomasville, his advice was, do not put atrophin in an old person's eye.

The second paper on the program was entitled "Uterine Cancer," by Dr. C. C. Harrold of Macon, Georgia. He reported 67 cases of cancer of the cervix to three of the body of the uterus occurring in the past five years. He stated that radium alone in cancer of the fundus is insufficient. A complete hysterectomy is necessary. Many deaths from cancer of cervix are due to ignorance of

women and, sorry to say, some physicians. Too often examination is neglected or postponed until too late.

The third paper on the program "Hysterectomy versus Suspension" by Dr. C. K. Wall, Thomasville, Georgia. Dr. Wall discussed the different conditions occurring in the female pelvis where it frequently taxes the judgment of the operator to know whether to perform hysterectomy or suspension of one sort or another. The papers of Doctors Harrold and Wall were discussed jointly. Those entering into the discussion were Doctors Cheshire, Walker, Watt, Sanchez and Sharp. Doctors Harrold and Wall closed the discussion.

At the close of the morning session a delightful luncheon was served by the Ladies Auxiliary of the Methodist Church.

The afternoon session was opened with an address from the President of the Medical Association of Georgia, Dr. C. K. Sharp, who is also an active member of the Second District Medical Society. Dr. Sharp stated that he had visited many districts in the state since May and he found that the Second District compared favorably with others in the state. He urged the physicians to join the county societies thus become active members of the state society. He stressed the value of the state journal and the medical defense feature and the fellowship in the society. He also touched upon the Basic Science Law, Ellis Health Law and the pitiful amount given by the state of Georgia for its health work. Malaria at the present time seems on the increase.

The fourth paper on the program entitled "Head Injuries" was presented by Dr. J. Calvin Weaver of Atlanta. Dr. Weaver in the brief time allotted presented a paper which was of great aid to the general physician who naturally sees head injuries in increasing numbers because of the greatly increased traffic. Dr. Weaver gave a concise presentation of this subject and outlined the symptoms and signs in a very clear way to show which cases to operate upon and which not to. The paper was discussed by Doctors Wall, Harrold and Weaver.

At this time a committee composed of Doctors Redfern, Wheat and Ainsworth made the following report:

Committee Report

Next place of meeting, Moultrie, Georgia. There were no members present from Moultrie at this meeting but it was thought advisable to carry the meeting to Moultrie next time in order to stimulate their interest, provided the physicians of Moultrie saw fit to

BOOK REVIEWS AND ABSTRACTS

Mark S. Dougherty, M. D.
Department Editor

BOOK REVIEWS

Review of the Seventh Edition of Phillips' Book on Diseases of the Ear, Nose and Throat

The seventh edition of Phillips' book is a complete work on diseases of the Ear, Nose and Throat. However, the part devoted to the ear is perhaps the most thoroughly prepared. The physiology of hearing, pathology and medical and surgical treatment is quite a material improvement over the last edition. Also in the tests for hearing there is quite an improvement. The chapter, "The Hearing Problem" was most interesting.

The section that the general practitioner would be most interested in is the one devoted to the influence of General Diseases upon the ear, nose and throat. The cuts and illustrations are perhaps the best ones in the book.

The section devoted to the nose is practically unchanged except for an improvement in the submucous resection operation, to which I see no particular advantage.

The section devoted to the Para-Nasal Sinuses is very good, particularly the illustrations of the operations.

The chapter of Laryngoscopy, Esophagoscopy and Bronchoscopy is entirely new and gives the most modern methods and instruments to use.

The book is an excellent one and is ideal to use as a standard text book in medical schools.

B. RUSSELL BURKE, M. D.

478 Peachtree, St., Atlanta.

"Epilepsy, Comparative Pathogenesis, Symptoms, Treatment."

By L. J. J. Muskens, M. D., of Amsterdam. General secretary of the International League Against Epilepsy. Foreword by Sir Charles S. Sherrington. 435 pages, illustrated. New York. Wm. Wood and Co. \$8.00.

This volume is the fruit of fifteen years of experimental studies and extensive clinical experience with epilepsy, by an outstanding investigator. It merits the careful consideration of all students of epilepsy. While the conception of the nature of epilepsy which is developed may not be acceptable, the clinical discussion is extremely valuable to any interested in this condition, and it contains numerous references to the literature. It can therefore be heartily recommended to the general practitioner.

Part One is devoted to the experimental studies of the author. Numerous and detailed accounts are given, out of which the author's conception of the nature of epilepsy is developed. The basis of this conception is the myoclonic reflex. This reflex,

which is shown by a small proportion of normal cats, consists of a localized shock-like muscular contraction in response to an unexpected tactile or acoustic stimulus, as a loud noise. With the administration of monobromide of camphor, these reflexes could be elicited in all of the cats used; with increasing doses of the drug, spontaneous shocks appeared, also a spread of the motor response up to a complete fit. The type of fit was comparable in all respects to an epileptic convulsion. The fit is thus considered to be fundamentally a reflex phenomenon. The fit seemed to be the culmination of a series of myoclonic shocks. After the fit, the animal seemed to revert to a normal condition, both mentally and physically, and myoclonic reflexes could not be elicited. The fit thus may be viewed as a "discharge," the function of which is to detoxicate the animal. Preceding the fit, when the animal exhibits spontaneous myoclonic shocks, the animal is said to be in a condition of "charge." It was found that there was a predilection for spontaneous shocks when the animal was falling asleep, or immediately on awakening (a time when epileptic convulsions are frequent. Pregnancy diminished the tolerance of the animal to the drug, but a meat diet, a good meal and good nutrition increased the tolerance.

From the clinical standpoint, Muskens emphasizes the frequency of myoclonic shocks in epilepsy (so-called myoclonic epilepsy, which he considers as the prototype of "essential epilepsy"). It is also of interest that myoclonic shocks seem to increase in frequency up to the culminating epileptic attack. It is well known that convulsions in man may follow a sudden acoustic stimulus, as a loud noise. The fits produced in the experimental animals were similar to those in epilepsy, including the prodromal period, aura, tonic-clonic spasm followed by a period of rest, and immunity from the stimuli which produced the attack. Muskens considers the fit as primarily of a protective function—to detoxicate the organism, although if repeated, it becomes a dangerous and pathological reaction. The fit is physiologically considered as a central reflex "after-discharge," of a myoclonic reflex.

Part Two is devoted to the effect of lesions in the nervous system on the fits produced by monobromide of camphor in cats. It is interesting to note that the myoclonic reflexes are impeded by any lesion of the pyramidal tracts, although they may be obtained from the isolated spinal cord.

Part Three is devoted to the clinical phases of epilepsy. The myoclonic shocks of epileptics are emphasized; if these are not sufficient to detoxicate, a convulsion will occur. He considers the convulsion

as essentially of a reflex nature, and protective in function, although he emphasizes the pathological nature if repeated. The frequency of myoclonic shocks in infancy, in the transition periods between sleep and the waking states are pointed out. He emphasizes the need of thorough investigation of the circumstances surrounding the first fit, which is most important from the standpoint of treatment. As it is the general practitioner who usually sees the patient at this time, the future of the patient lies in his hands. There is a good classification of epilepsy, and an excellent discussion of infantile convulsions. All phases of epilepsy are carefully considered, including the psychic equivalents. Under the treatment, personal hygiene is given the greatest emphasis.

The extensive citations from the literature make this an excellent reference book.

WM. A. SMITH, M. D.

THE EXAMINATION OF PATIENTS

BY

NELLIS B. FOSTER, M. D.
(W. B. Saunders Co., 1928)

Dr. Foster's book is an excellent text for the use of students or practitioners in the study of diagnosis based on physical examination of patients. In the introductory chapter he points out that Diagnosis is both a science and an art; a science in the method of using facts secured, and an art largely in the mode of collecting facts.

The first sixty pages are concerned with the assembling of data by the use of a history and general physical examination. Many valuable suggestions which would aid in the eliciting of a useful anamnesis and in the detection of significant physical signs are given. Then follows a very fine discussion of signs useful in differential diagnosis of morbid states associated with fever—the febrile diseases. This goes through the gamut of the exanthemata, purpuric and other conditions, specific infections, toxic states, meningeal syndrome, etc.

Next follow several chapters devoted to system, examination; diseases of the respiratory, cardio-vascular, digestive, hematopoietic, endocrine, genito-urinary, and central nervous systems are considered from a standpoint of physical signs and differential diagnosis.

There are chapters devoted to special types of examinations such as the ear and throat, the extremities, gynecological examinations, the examination of the breasts, and a chapter on special tests, such as Cholecystography, icterus index, tuberculin tests, Schick test, etc.

The whole work is very well written and has the value of a personality with large clinical experience in its presentation. The volume is well arranged, and comfortable to read and handle.

J. C. MASSEE, M. D.

NARCOLEPSY

E. C. THRASH, AND J. C. MASSEE, *Atlanta, Ga.* (*Journal A. M. A.*, Dec. 8, 1928), report the case of a negro, aged 35 (who was apparently well until 1918, when he suffered a fracture of the nose and superior maxilla in a railroad wreck in France. Following this he was in the hospital for about a month and slept a good deal. Afterward he noticed that when his boss gave him a sudden order or when he was in any excitement he became subject to queer sensations of weakness and tremulousness of his muscles. The sensations were more severe at times than others. Occasionally, he would be able to reach a chair and sit down; otherwise he would fall to the ground, limp and unable to move, although perfectly conscious. It was impossible for him to stay in a group in which laughing and joking were going on, as he became helpless when laughing. There seemed to be a slight aura to the attacks. More recently these attacks had been brought on by trying to read, although there were no visual disturbances except for involuntary movements of the eyes. Soon after the accident in France the patient noticed that he frequently felt an overpowering drowsiness and would drop off into a short sleep many times during the day. These moments of unconsciousness resembled normal sleep in every way except that they came on frequently during the day and overpowered him regardless of what he was doing. He had gone to sleep while walking, talking, eating, and even while driving his car. He was easily awakened from these lapses and felt as refreshed as on awakening from normal sleep. At times his repose was interrupted at night, but even ten hours or more of sleep did not protect him from narcoleptic and cataplectic attack. The patient's father, mother, one brother and a sister were living and well. One brother died of tuberculosis; one sister died of an unknown cause. There was no family history of hereditary diseases. The father, mother and siblings were of normal size and development. The patient had been married for eight years; his wife and four children were living and well. There had been one miscarriage. The patient used coffee and tobacco moderately, and alcohol occasionally, but stated that he never used drugs. The patient had had measles as a child and mumps in 1918. He had had gonorrhea in 1912, and a tonsillectomy had been performed in 1927. Apparently he developed normally. However, he had continued to grow until the present time and stated that he had never been able to wear more than three or four pairs of shoes of the same size, but had had to increase the size of his shoes and hats periodically. During the past ten months he had increased from 220 pounds (91 Kg.), his usual weight, to 250 pounds (113 Kg.). There seemed to be a normal libido and sex development.

BOOKS RECEIVED

RECENT ADVANCES IN MEDICINE, Clinical Laboratory Therapeutics by G. E. Beaumont, M. A., D. M., F. R. C. P., D. P. H., Physician in charge of out-patients, Middlesex Hospital; Physician in the Hospital for Consumption and Diseases of the Chest, Brompton; Medical Tutor and Lecturer in Practical Medicine, Middlesex Hospital Medical School; Sometime Traveling Fellow, University of Oxford and E. C. Dodds, M. D., Ph. D., B. Sc., M. R. C. P., Professor of Biochemistry in the University of London; Chemical Pathologist to the Middlesex Hospital, Bland-Sutton Institute of Pathology; Pathologist to the Royal National Orthopaedic Hospital. Fourth Edition with 48 illustrations. The principal changes in this edition are as follows: Certain methods available in the diagnosis of spinal cord compression from various causes are described. They include an examination of the Hydrodynamic and Chemical properties of the cerebro-spinal fluid by combined cisternal and lumbar puncture and the intrathecal injection of lipiodol. The latter is illustrated by an x-ray photograph. Contains 426 pages. Publishers: P. Blakiston's Son & Company, 1012 Walnut Street, Philadelphia.

A TEXT BOOK OF SURGERY by W. Wayne Babcock, M. D., Professor of Surgery and Clinical Surgery in The Temple University; Surgeon to the Samaritan Hospital and to the American Hospital for diseases of the stomach, Philadelphia; Chief of the Surgical Service, U. S. General Hospital No. 6; 1917-1919. Contains 1367 pages with 1050 illustrations. Price \$10.00. Publishers: W. B. Saunders Company, West Washington Square, Philadelphia.

NEWS ITEMS

The State Tuberculosis Sanatorium at Alto, is putting on as extension work clinics in various places for examination of school children. Already clinics have been held in Coffee County, Spalding County, Bulloch County and Habersham County. Some three or four hundred children have been examined. It is planned in 1929 to make this clinic a permanent feature, and it is hoped to examine a large number of these children. The purpose of this clinic is to find children with early diagnosis, and the clinics are put on in co-operation with the local doctors.

The management of the State Tuberculosis Sanatorium at Alto, is anxious to secure the services of two physicians. One for third assistant physician at the sanatorium, and the other for field clinic work. Any one interested, may write to Dr. Edson W. Glidden, Superintendent, Alto, Georgia.

Ground has been broken for a foundation of the new Masonic Children's Building at the Sanatorium at Alto. Work of construction will begin within the next few weeks.

The American College of Physicians will hold its thirteenth annual session, April 8 to 12, 1929, at Boston, Massachusetts. Hotel Statler will be headquarters.

Dr. Eugene B. Elder, formerly superintendent of the Georgia Baptist Hospital, Atlanta; and recently superintendent of the Morrell Memorial Hospital, Lakeland, Florida; has accepted the position of superintendent of the Knoxville General Hospital, Knoxville, Tennessee.

Dr. Thos. W. Moore, Huntington, West Virginia, was elected President of the Southern Medical Association at its last annual session held at Asheville, North Carolina; Dr. Paul H. Ringer, Asheville, First Vice-President; Dr. F. J. Underwood, State Health Officer for Mississippi, Second Vice-President; Dr. William R. Bathurst, Little Rock, Arkansas, Chairman of the Board of Trustees. Other members of the Board reelected were: Dr. W. S. Leathers, Nashville, Tenn.; Dr. Stewart R. Roberts, Atlanta; Dr. Chas. C. Bass, New Orleans, La.; and Dr. J. Shelton Horsley, Richmond, Va.

The Thomas County Medical Society met at Coolidge on October 30th. The members were entertained at dinner by Dr. and Mrs. Thos. H. Chestnutt, Dr. and Mrs. Henry Jones. The scientific program consisted of a symposium on malaria.

The Ware County Medical Society met at Blackshear on November 1. The program consisted of a symposium on tuberculosis. Luncheon was served at the Phoenix hotel.

The Continental Anglo-American Medical Society was organized in 1885 and has published a list of Anglo-American physicians practicing in Europe and Northern Africa annually since 1889. The purpose of the Society is to establish the closest relations possible with their colleagues practicing in America and England, also to overcome a boycott by the hotels of Europe by refusing to give the address of American or English doctors, endeavoring always to have the hotel physician employed. The hotel physicians speak English so poorly, if at all, that the patient does not fully understand him and in consequence is irritated and his trouble aggravated. A list will be mailed to any one free of charge upon request to Dr. Sherwood Dunn, 54 Bd. Victor Hugo, Nice, France.

The American Board of Otolaryngology held an examination in New York City, October 11. One hundred and thirty applicants were examined; one hundred and thirteen passed. The Board will hold an examination in Portland, Oregon, Monday, July 8, 1929, during the session of the American Medical Association. Those desiring information in reference to the examination will please communicate with Dr. W. P. Wherry, Secretary, Board of Otolaryngology, 1500 Medical Arts Building, Omaha, Nebraska.

Stewart-Webster Counties Medical Society met at Richland on November 15. Dr. W. W. Binion, Benevolence; Dr. J. C. Patterson and Dr. G. Y. Moore, Cuthbert, attended the meeting.

Dr. J. L. Campbell, Atlanta, delivered an address on Preventative Medicine before the Atlanta Federation of Trades on November 15.

The Floyd County Medical Society met at Hotel Armstrong, Rome, on November 16. The program consisted of informal discussions of Preventative Medicine followed by an address delivered by Dr. Wm. J. Shaw.

Dr. A. C. Shamblin, Rome, was elected chairman of the section on anesthetics of the Southern Medical Association at its meeting held recently at Asheville.

Dr. T. F. Abercrombie, Commissioner of Health for Georgia; Dr. Eugene Murphey, Augusta; Dr. Paul Eaton, Augusta; Dr. V. H. Bassett, Savannah; and Dr. L. L. Williams, United States Public Health Service, attended a meeting on Malarial Control held at Waynesboro on November 20.

The Spalding County Medical Society met at the Griffin Hospital, Griffin, on November 20.

The Studio of Speech Reading conducted by Mrs. Saint Julien Cullum and her able assistants at 510 Greene Street, Augusta, is the only private institution in the state and one of the few in the South where pupils have the advantages of a course for the hard of hearing children with the addition of the regular and advanced work for the adults in the same school. Miss McCaughrin is nationally known for her efficiency in teaching the hard of hearing and deafened. She will teach private pupils who will have the privilege of all practice work given by the normal students. Miss Neville has been very successful in her work and is considered one of the most efficient teachers.

The Third District Medical Association met at Fitzgerald on November 21st as the guest of Ben Hill County Medical Society. Dr. E. J. Dorminy, Fitzgerald, read a paper entitled, "Para-Typhoid Fever;" Dr. J. A. Fountain, Macon, "Malta Fever and Its Relation to Bacillus Abortus;" Dr. Frank Ward, Fitzgerald, "Obstetrics by the General Practitioner;" Dr. Robert C. Pendergrass, Americus, "Pregnancies—Birth Injuries and Deformities;" Dr. Marion T. Benson, Atlanta, "Obstetric Analgesia." Address by Dr. C. K. Sharp, Arlington, President of the Association.

Sixth District Medical Society met at Macon on November 28th. Macon Medical Society entertained the members to luncheon in the Nurses' Dining Room of the Macon Hospital. Dr. V. P. Sydenstricker, Augusta, gave a "Medical Clinic;" Dr. Wm. A. Mulherin, Augusta, gave a "Pediatric Clinic;" Dr. Paul Eaton, Augusta, gave a lecture on "Public Health Problems."

The State Board of Health gave out a statement in November that in three sections of Georgia there were a greater spread of malaria than at any time in the past thirty years. The larger area affected was in southwest Georgia.

Dr. Joe R. Clemmons, Macon, announces the appointment of the following physicians to the staff of the Macon Hospital: surgery, Dr. C. H. Richardson, Jr., Harry Moses and O. H. Weaver; Medical, Drs. I. H. Adams, F. L. Webb, and T. E. Rogers; obstetrics, Drs. O. S. Spivey and O. R. Thompson; urology, Drs. W. L. Bazemore and Ernest Corn; eye, ear, nose, throat, Drs. Anderson and C. L. Pennington; dermatology, Dr. J. M. Sigman, orthopedics, Dr. W. A. Newman; mental, Dr. Y. H. Yarbrough.

On Wednesday, December 5, the officials and members of the medical, pharmaceutical and allied professions of Lafayette, Indiana, were addressed by Dr. Charles E. Vanderkleed, chairman of the Contact Committee, of the American Pharmaceutical Manufacturers' Association.

The New York Polyclinic Medical School and Hospital, New York City, announces the opening of its new Physical Therapy Department in its main building. This department will serve for teaching, research and for the treatment of both in- and out-patients, and is under the direction of Dr. Richard Kovacs, Clinical Professor of Physical Therapy.

Dr. H. S. McCoy, formerly of Doerun, has removed to Sylvester.

The Pan American Medical Association will hold its next congress at Havana, Cuba, from December 29, 1928, to January 3, 1929. The program which is being arranged by President, Dr. Fred H. Albee, New York City, will include four orations upon the subjects of surgery, medicine, pediatrics, and tropical medicine. This congress will be representative of the medical profession of the entire Western Hemisphere. Chapters of the Association are being organized in various centers of North America.

OBITUARY

Dr. Charles J. Montgomery, Member, Augusta; University of Pennsylvania School of Medicine, Philadelphia, 1892; aged 60; died January 14. He was born in Milledgeville and after receiving his degree in medicine, served as physician at the State Farm for a number of years. Dr. Montgomery became interested in the Bertillon system of identification of criminals and was largely responsible for its adoption by this state. He was at one time an officer in the state militia and served as a member of the Board of Trustees of the Georgia State Sanitarium at Milledgeville, lecturer on medical jurisprudence and hygiene at the University of Georgia Medical Department, Augusta. Dr. Montgomery enlisted as a volunteer during the World War. He spent a great deal of time reading and writing, being passionately fond of both. His ideals of life were devotion to duty which were demonstrated daily by his untiring efforts for both family and country. Surviving him are his widow, two sons and two daughters.

Reuben H. Poole, Douglasville, Southern Medical College, Atlanta, 1893; aged 58; died October 5, at

his home, of heart disease. He was a prominent and highly esteemed physician of his home county, and had practiced medicine there for a quarter of a century. Dr. Poole was a member of the Masonic fraternity and the Methodist church. Surviving him are the following relatives: Mrs. R. E. Baxley, Miss Carrie Poole, Douglasville; Mrs. B. F. Pickett, Newnan; Mrs. J. C. Wallace, Atlanta; and DeWitt T. Poole, Newnan. Funeral services were conducted by Rev. Willis Jones and Rev. Lowery.

Jesse J. Crumbley, Cedartown, Emory University School of Medicine, Atlanta, 1892; aged 58; died at his home on September 29 after an illness of long duration. He was a native of Carmen County, Alabama, and removed to Cedartown a number of years ago. Dr. Crumbley was a prominent citizen and a devout Christian. Surviving him are his widow, two daughters, Mrs. C. M. White and Miss Lula Crumbley, Cedartown; four sons, Homer Crumbley, Corsicana, Texas; Noel Crumbley, Birmingham, Alabama; Victor and Corbett Crumbley, Cedartown. Funeral services were conducted by Rev. Randolph Hamrick.

Dennis L. Thomas, Lula, College of Physicians and Surgeons, Baltimore, Maryland, 1892; died at his home, October 15. He was born and reared in Eatonton, where he practiced medicine for years. Surviving him are his widow and two daughters, Miss Marjorie and Dennis L. Thomas. Interment was in the city cemetery of Eatonton.

Edmund Warrill Carter, Member, Thomaston, University of Georgia Medical Department, Augusta, 1906; aged 46; died at a private hospital in Griffin on October 26th, from injuries received in an automobile accident. He practiced at Prattsburg until the World War, served as lieutenant at Camp McClellan, Anniston, Alabama, during the war. After receiving an honorable discharge from the U. S. army, he began practice at Thomaston, where he enjoyed an excellent practice. Dr. Carter possessed a pleasing personality and was held in high esteem by hundreds of friends. Surviving him are his parents, Mr. and Mrs. John A. Carter; two brothers, Grady and Thomas Carter; one sister, Mrs. Chas. Kin, Cuthbert; and one son. Interment was in Prattsburg cemetery.

THE VALUE OF THE ALUMNAE ASSOCIATION

(Continued from Page 555)

"I solemnly pledge myself before God and in the presence of this assembly to pass my life in purity and to practice my profession faithfully. I will do all in my power to elevate the standard of my profession. With loyalty will I endeavor to aid the physician in his work and devote myself to the welfare of those committed to my care."

"For the most part we have 'kept the

faith.' We find, however, so often in our organization work there are things which creep in and defeat our progress. Let us take to our hearts with the devotion of Florence Nightingale and those who have followed in her footsteps the creed of Mary Stewart, a modern professional woman. This creed was first published as a nurses' Creed. It has since become the Collect of the Business and Professional Women's Clubs of this country:

"Keep us, oh God, from pettiness. Let us be large, in thought, in word, in deed. Let us be done with fault finding and leave off self-seeking. May we put away all pretense and meet each other face to face, without self-pity and without prejudice. May we be never hasty in judgment and always generous. Let us take time for all things. Make us to grow calm, serene and gentle. Teach us to put into action our better impulses, straightforward and unafraid. Grant that we may realize it is the little things that create differences; that in the big things of life we are as one. And may we strive to touch and to know the great common woman's heart of us all. And, oh, Lord God, let us not forget to be kind!"

SECOND DISTRICT MEDICAL SOCIETY

(Continued from Page 557)

accept the society's invitation to meet with them. The secretary was requested to take the matter up with the physicians of Moultrie, if the meeting could not be held in Moultrie. Donalsonville requested that they be allowed the privilege. Thomasville also asked for the next meeting.

The following men were asked to read papers at that time: Surgery, by Dr. Wheat, Bainbridge; Medicine, by Dr. E. F. Wahl, Thomasville; E. E. N. & T., by Dr. J. T. King, Thomasville.

It was requested by the committee that a visiting man be asked to read a paper on Pediatrics and another either Medicine or Surgery.

Following this report the final paper on the program was presented by Dr. M. A. Fort, Health Officer of Decatur County, on some work he had done on pin worm infection. He has found that in this infection that calomel given at night, followed by salts in the morning is most helpful in clearing

the intestinal tract and that mercurial ointment applied locally helps to kill the worms that lodge around the arms.

The meeting adjourned at 4 P. M.

Respectfully,

CHAS. H. WATT, M. D.,

Secretary, Second District Medical Society.

COUNCIL ACCEPTS OPTOCHIN

In compliance with the request of the Council on Pharmacy and Chemistry the name "Numoquin" has been changed to "Optochin."

Optochin is used not only in the treatment of pneumonia, but also in such conditions as pneumococcal meningitis and pneumococcal serpiginous ulcers. In the treatment of pneumonia it is administered by mouth.

The theory upon which the treatment of pneumonia with Optochin Base is founded has evolved from the results obtained by a large number of investigators, and is outlined as follows:

The maximum bactericidal power of the remedy must be maintained continuously for a definite period—1 to 3 days—employing the minimum quantity of the remedy necessary for the purpose. It was found in practice that, provided Optochin Base is used, and given in doses of 4 grains every 5 hours, day and night, and further, provided the treatment is begun within 24 hours, or at least not later than the second day after the onset of the disease, the results are all that could be wished. The fever abates rapidly, the course of the disease is shortened and rendered milder, and the patients experience a sensation of euphoria, while the appetite and general condition improve.

The base is used because, being practically insoluble in water, it is but slowly taken up into the blood circulation. With every dose of Optochin Base about 5 ounces of milk are given. The milk prevents the too rapid formation of the more soluble Optochin Hydrochloride by the action of the hydrochloric acid secreted and thus assists in maintaining a uniform optimum concentration of the remedy in the blood. No other food or drink is given during the 3 days' treatment.

MEDICAL AND PHARMACEUTICAL CO-OPERATION

Perhaps one of the outstanding reasons for the progress in the scientific development of new products has been the spirit of co-operation which has existed between the medical profession and the pharmaceutical industry.

By this close co-operation medical science has contributed to pharmaceutical progress and the manufacturing pharmacists of the country in turn have made

a definite contribution toward the development of new medicinal products.

On Wednesday, December 5, the officials and members of the medical, pharmaceutical and allied professions of Lafayette, Indiana were addressed by Dr. Charles E. Vanderkleed, Chairman of the Contact Committee, of the American Pharmaceutical Manufacturers' Association.

The subject of Dr. Vanderkleed's address was "Improvement in the Quality of American Drug Products Due to Co-operation in the Industry." It is interesting to see the representatives of the several allied professions making arrangements for a periodical study of mutual interests of professional nature with a view to increasing mutual usefulness.

It is only through medical and pharmaceutical co-operation that the greatest advances can be made in conquering disease and improving the health of the American people.

HOT SPRINGS, ARK.

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Bubbling from the depths of the earth, comes Mountain Valley Water to lend its nature endowed aid to the skill of modern medical science.

Mountain Valley Water is packaged in sterilized light ray refracting green glass bottles holding a half gallon each. The progressive and unprejudiced physicians throughout the nation do not hesitate to prescribe it. It is a compliment to their treatment—and a delight to the patient.

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COUNTY AND COMMUNITY HOSPITALS

The need for additional hospital facilities in Waycross and Ware county is a community problem, said Judge J. D. Blalock in charging the grand jury at the opening or the regular December term of Ware county superior court.

"Nothing is more urgent in our county than the need for increased hospital facilities," Judge Blalock said.

He pointed out that Waycross is the center of a broad section of country that is not adequately served so far as hospitals are concerned, and he urged the grand jury to take some steps to encourage a movement to remedy this condition.

He prefaced his appeal for a new hospital by calling attention to the extreme importance of law enforcement and law observance and charged the jury along the lines of their general duties.

Medical Association of Georgia

Next Annual Session, Macon, Ga., May 8, 9, 10, 1929

OFFICERS

| | | | |
|----------------------|-------------------------|-----------------------|---------------------------|
| President | C. K. Sharp, Arlington | Second Vice-President | M. Hines Roberts, Atlanta |
| President-Elect | Wm. R. Dancy, Savannah | Secretary-Treasurer | Allen H. Bunce, Atlanta |
| First Vice-President | W. E. McCurry, Hartwell | Parliamentarian | M. A. Clark, Macon |

DELEGATES TO THE A. M. A.

| | | | |
|----------------------------|----------|--------------------------|---------|
| Wm. H. Myers (1928-30) | Savannah | E. C. Thrash (1928-30) | Atlanta |
| Alternate, Wm. A. Mulherin | Augusta | Alternate, C. W. Roberts | Atlanta |
| A. H. Bunce (1927-29) | Atlanta | | |
| Alternate, Wm. R. Dancy | Savannah | | |

COUNCIL

| | | | |
|----------------------|---------|--------------------|--------|
| M. M. Head, Chairman | Zebulon | C. L. Ayers, Clerk | Toccoa |
|----------------------|---------|--------------------|--------|

Councilors

| | |
|-----------------------------|------------|
| 1. Wm. H. Myers (1930) | Savannah |
| 2. J. A. Redfearn (1930) | Albany |
| 3. G. Y. Moore (1930) | Cuthbert |
| 4. O. W. Roberts (1930) | Carrollton |
| 5. E. C. Thrash (1931) | Atlanta |
| 6. M. M. Head (1931) | Zebulon |
| 7. M. M. McCord (1931) | Rome |
| 8. H. M. Fullilove (1931) | Athens |
| 9. C. L. Ayers (1929) | Toccoa |
| 10. S. J. Lewis (1929) | Augusta |
| 11. A. S. M. Coleman (1929) | Douglas |
| 12. J. Cox Wall (1929) | Eastman |

Vice-Councilors

| | |
|-----------------------------|---------------|
| 1. C. Thompson (1930) | Millen |
| 2. R. F. Wheat (1930) | Bainbridge |
| 3. Chas. A. Greer (1930) | Oglethorpe |
| 4. W. H. Clark (1930) | LaGrange |
| 5. W. A. Selman (1931) | Atlanta |
| 6. J. M. Anderson (1931) | Barnesville |
| 7. W. H. Perkinson (1931) | Marietta |
| 8. Paul L. Holliday (1931) | Athens |
| 9. J. K. Burns, Jr., (1929) | Gainesville |
| 10. H. D. Allen, Jr. (1929) | Milledgeville |
| 11. K. McCullough (1929) | Waycross |
| 12. Austin L. Smith (1929) | Cochran |

COMMITTEES

Scientific Work

| | |
|----------------------------------|---------|
| Wm. A. Mulherin, Chairman | Augusta |
| C. W. Roberts | Atlanta |
| A. H. Bunce, Secretary-Treasurer | Atlanta |

Public Policy and Legislation

| | |
|--|-----------|
| Chas. E. Waits, Chairman (1931) | Atlanta |
| J. W. Palmer (1929) | Ailey |
| A. R. Rozar (1930) | Macon |
| C. K. Sharp, President | Arlington |
| A. H. Bunce, Secretary-Treasurer | Atlanta |
| T. F. Abercrombie, Commissioner of Health, State of Georgia | Atlanta |

Medical Defense

| | |
|-------------------------------------|---------|
| M. A. Clark, Chairman (1933) | Macon |
| E. C. Davis (1929) | Atlanta |
| E. C. Thrash (1931) | Atlanta |
| M. M. Head, Chairman, Council | Zebulon |
| Allen H. Bunce, Secretary-Treasurer | Atlanta |

Hospitals

| | |
|----------------------------------|----------|
| C. S. Lentz, Chairman (1933) | Augusta |
| Grady N. Coker, Secretary (1932) | Canton |
| B. T. Wise (1929) | Plains |
| Geo. F. Klugh (1930) | Atlanta |
| Julian K. Quattlebaum (1931) | Savannah |

Abner Wellborn Calhoun Lectureship

| | |
|-----------------------------------|----------|
| James E. Paullin, Chairman (1933) | Atlanta |
| G. B. Smith (1929) | Rome |
| E. E. Murphy (1930) | Augusta |
| Craig Barrow (1931) | Savannah |
| Frank K. Boland (1932) | Atlanta |

Necrology

| | |
|-------------------------|----------|
| E. C. McCurdy, Chairman | Shellman |
|-------------------------|----------|

| | |
|--------------|------------|
| R. L. Miller | Waynesboro |
| O. H. Weaver | Macon |

Health and Public Instruction

| | |
|----------------------------------|-----------|
| Theodore Toepel, Chairman (1929) | Atlanta |
| Paul Eaton (1930) | Augusta |
| V. H. Bassett (1931) | Savannah |
| C. K. Sharp, President | Arlington |
| A. H. Bunce, Secretary-Treasurer | Atlanta |

Cancer Commission

| | |
|--------------------------|-------------|
| J. L. Campbell, Chairman | Atlanta |
| Chas. Usher | Savannah |
| C. K. Wall | Thomasville |
| G. Y. Moore | Cuthbert |
| C. A. P. Ebbert | Grantville |
| A. R. Rozar | Macon |
| R. M. Harbin | Rome |
| M. B. Allen | Hoschton |
| C. D. Whelchel | Gainesville |
| G. T. Bernard | Augusta |
| W. F. Reavis | Waycross |
| J. C. Wall | Eastman |
| E. L. Bishop | Atlanta |

Fraternal Delegates to Other State Meetings

To visit Alabama: R. F. Wheat, Bainbridge; J. C. Patterson, Cuthbert.

To visit Florida: K. McCullough, Waycross; Gordon Chason, Bainbridge.

To visit North Carolina: Paul L. Holliday, Athens; Hal M. Davison, Atlanta.

To visit South Carolina: V. P. Sydenstricker, Augusta; C. H. Richardson, Jr., Macon.

To visit Tennessee: Trammell Starr, Dalton; R. C. Maddox, Rome.

Directory of the Medical Association of Georgia for 1928

Names of all members and officers are published as corrected by Secretaries of county societies.

BALDWIN COUNTY

Officers

Sec'y.-Treas. Mobley, Jno. W., Jr.

Members

Allen, E. W., Milledgeville
Allen, H. D., Jr., Milledgeville
Allen, H. D., Sr., Milledgeville
Binion, Richard, Milledgeville
Bostwick, W. A., Milledgeville
Bowen, U. S., Milledgeville
Bradford, R. W., Milledgeville
Cox, C. G., Milledgeville
Dobyns, W. F., Georgia State Sanitarium, Milledgeville
Echols, Geo. L., Milledgeville
Fowler, A. H., Milledgeville
Garrard, J. I., Milledgeville
Hall, T. M., Milledgeville
Longino, L. P., Milledgeville
Mobley, J. W., Jr., Milledgeville
Mobley, J. W., Sr., Milledgeville
Pettit, J. K., Thiells, N. Y.
Rankin, D. T., Milledgeville
Scott, W. M., Milledgeville
Swint, R. C., Milledgeville
Walker, N. P., Milledgeville
Wheeler, Z. A., Milledgeville, (Hon.)
Wiley, Jno. D., Milledgeville
Yarbrough, Y. H., Milledgeville
Youmans, C. R., Milledgeville

BANKS COUNTY

Member

Deadwyler, Mat P., Maysville

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Vice-President Almand, C. B.
Sec'y.-Treas. Mathews, W. L.

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Bowdoin, W. H., Statham
Harris, E. R., Winder
Mathews, W. L., Winder
Pharr, L. P., Auburn
Randolph, W. T., Winder
Ross, S. T., Winder
Tramel, J. R., Statham

BARTOW COUNTY

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Vice-President Horton, A. L.
Sec'y.-Treas. Wofford, W. E.
Delegate Wilson, R. E.

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Banks, G. T., Pine Log
Bowdoin, J. P., Adairsville
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 Glidden, Edson W., Alto
 Harden, O. N., Cornelia
 Jackson, J. B., Clarksville
 Lamb, E. H., Demorest
 Lamb, R. B., Demorest
 McClure, J. H., Cornelia

HALL COUNTY**Officers**

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 Vice-President _____ Phillips, H. K.
 Sec'y.-Treas. _____ Cheek, Pratt
 Delegate _____ Downey, J. H.

Members

Bryson, L. R., Gainesville
 Burns, J. K., Gainesville
 Burch, J. C., Alto
 Butler, C. G., Gainesville
 Cheek, Pratt, Gainesville
 Davis, B. B., Gainesville
 Downey, J. H., Gainesville
 Gibbs, E. T., Gainesville
 Gower, J. Charley, Gainesville
 Hodges, L. W., Gainesville
 Liles, W. W., Gainesville
 Meeks, J. L., Gainesville
 Meeks, W. T., New Holland
 Neal, L. G., Cleveland

Palmour, W. A., Gainesville
 Phillips, H. K., Helen
 Quillian, W. H., Lula
 Rogers, R. L., Gainesville
 Rudolph, J. B., Gainesville
 Titshaw, H. S., Gainesville
 Wellborn, C. J., Gainesville
 Whelchel, C. D., Gainesville
 Williams, Geo. C., Clermont

HANCOCK COUNTY**Officers**

President.....Earl, H. L.
 Sec'y.-Treas.....Jernigan, C. S.

Members

Earl, H. L., Sparta
 Jernigan, C. S., Sparta

HARALSON COUNTY**Member**

Malone, W. H., Tallapoosa

HART COUNTY**Officers**

President.....Harper, G. T.
 Vice-President.....Meredith, A. O.
 Sec'y.-Treas.....McCurry, W. E.

Members

Clark, G. S., Hartwell
 Hailey, W. I., Hartwell
 Harper, G. T., Dewy Rose, R. 2
 Jenkins, J. C., Hartwell
 Jenkins, J. I., Bowman
 McCurry, W. E., Hartwell
 Meredith, A. O., Hartwell
 Teasley, B. C., Hartwell

HENRY COUNTY**Officer**

Sec'y.-Treas.....Ellis, H. C.

Members

Carmichael, W. W., Hampton (Hon.)
 Colvin, E. G., Locust Grove
 Crawford, R. L., Locust Grove
 Eberhart, A. B., McDonough
 Ellis, H. C., McDonough
 Harper, J. W., Hampton
 Smith, J. G., McDonough
 Tye, R. L., McDonough

HOUSTON-PEACH COUNTIES**Officers**

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 Vice-President.....Cater, R. L.
 Sec'y.-Treas.....Evans, E. L.

Members

Brown, M. S., Fort Valley
 Cater, R. L., Perry
 Evans, E. L., Perry
 Evans, H. E., Perry
 Haslam, J. E., Fort Valley
 Hickson, M. L., Fort Valley
 Kay, J. B., Byron
 Riley, J. H., Perry
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 Story, J. W., Kathleen
 White, W. S., Fort Valley

JACKSON COUNTY**Officers**

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 Vice-President.....Crow, H. E.
 Sec'y.-Treas.....Bennett, J. C.
 Delegate.....Allen, M. B.

Members

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 Allen, M. D., Hoschton
 Bennett, J. C., Jefferson
 Crow, H. E., Talmo
 Freeman, Ralph, Hoschton
 Hardman, L. G., Commerce
 Hubbard, F. M., Commerce
 Kennedy, W. C., Talmo
 Lord, C. B., Jefferson
 McDonald, E. M., Jefferson
 Rogers, A. A., Commerce
 Shankle, O. E., Commerce
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JASPER COUNTY**Officers**

President.....Anderson, J. F.
 Vice-President.....Belcher, F. S.
 Sec'y.-Treas.....Lancaster, E. M.

Members

Anderson, J. F., Hillsboro
 Belcher, F. S., Monticello
 Brown, J. A., Shady Dale
 Cary, R. F., Monticello
 Lancaster, E. M., Shady Dale
 Pittard, L. Y., Monticello

JENKINS COUNTY**Officers**

President.....Perkins, M. E.
 Vice-President.....Mulkey, Q. A.
 Sec'y.-Treas.....Thompson, C.
 Delegate.....Mulkey, Q. A.

Members

Clifton, Ben, Millen, R. F. D.
 Jones, J. M., Thrift
 Lee, H. G., Millen
 Mosteller, Malcolm, Millen
 Mulkey, Q. A., Millen
 Perkins, M. E., Millen
 Thompson, C., Millen

JOHNSON COUNTY**Officers**

President.....Bray, H. B.
 Vice-President.....Harris, T. L.
 Sec'y.-Treas.....Brantley, J. G.
 Delegate.....Brantley, J. G.

Members

Brantley, J. G., Wrightsville
 Bray, H. B., Wrightsville
 Harris, T. L., Wrightsville
 Meeks, J. A., Kite

JONES COUNTY**Officers**

President.....Waits, W. J.
 Sec'y.-Treas.....Zachary, J. D.

Members

Anderson, J. W., Gray (Hon.)
 Waits, W. J., Gray
 Zachary, J. D., Gray

LAMAR COUNTY**Officers**

President.....Corry, J. A.
 Vice-President.....Rogers, J. M.
 Sec'y.-Treas.....Anderson, Jno. C.
 Delegate.....Willis, C. H.

Members

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 Barron, J. M. F., Milner, R. F. D.
 Corry, J. A., Barnesville
 Rogers, J. M., Barnesville

Suggs, C. E., Barnesville
 Willis, C. H., Barnesville

LAURENS COUNTY**Officers**

President.....New, J. E.
 Vice-President.....Murray, D. L.
 Sec'y.-Treas.....Cheek, O. H.
 Delegate.....Claxton, E. B.

Members

Beddingfield, R. A., Cadwell
 Beddingfield, W. E., Rentz
 Benson, R. S., Alamo, R. No. 1
 Carter, J. G., Scott
 Chappell, R. J., Dudley
 Cheek, O. H., Dublin
 Claxton, E. B., Dublin
 Coleman, A. T., Dublin
 Edmondson, J. W., Dublin
 Hodges, C. A., Dublin
 Kea, T. B., Adrian
 Montford, H. L., Dublin
 Moye, C. G., Brewton
 Murray, D. L., Dexter
 New, J. E., Dexter
 Page, L. J., Dublin
 Thompson, W. C., Dublin
 Walker, Sidney, Dublin
 Woodward, D. D., Dudley

LOWNDES COUNTY**Officers**

President.....Ellis, S. B.
 Vice-President.....Owens, B. G.
 Sec'y.-Treas.....Burns, D. L.

Members

Bird, Frank, Valdosta
 Burns, D. L., Valdosta
 Crozier, G. T., Valdosta
 Elder, E. B., Knoxville General Hos-
 pital, Knoxville, Tenn.
 Ellis, S. B., Valdosta
 Giddens, C. C., Valdosta
 Griffin, A., Valdosta
 Little, A. G., Valdosta
 Meadows, C. B., Valdosta
 Mixson, J. F., Valdosta
 Owens, B. G., Valdosta
 Pennington, J. W., Howell
 Prescott, J. P., Lake Park
 Quarterman, P. C., Valdosta
 Saunders, A. F., Valdosta
 Smith, J. M., Valdosta
 Smith, T. H., Valdosta
 Talbot, T. M., Valdosta, (Hon.)
 Thomas, F. H., Valdosta
 Thomas, Jos. A., Valdosta
 Williams, T. C., Valdosta

MACON COUNTY**Officers**

President.....Greer, C. A.
 Sec'y.-Treas.....Savage, C. P.
 Delegate.....Frederick, D. B.

Members

Childs, J. N., Ideal (Hon.)
 Derrick, H. C., Oglethorpe
 Frederick, D. B., Marshallville
 Greer, C. A., Oglethorpe
 Lightner, L. L., Ideal
 Mullino, F. M., Montezuma
 McGill, R. E., 1016 Fourth St., Alex-
 andria, Louisiana
 Richardson, C. H., Sr., Montezuma
 Savage, C. P., Montezuma

MADISON COUNTY**Officers**

President.....Loden, G. L.
 Vice-President.....Westbrook, R. J.
 Sec'y.-Treas.....Gholston, W. D.
 Delegate.....Loden, G. L.

Members

Banister, H. G., Ila
 Gholston, W. D., Danielsville
 Hampton, H. H., Colbert
 Kelley, Geo. W., Carlton
 Loden, G. L., Colbert
 Whelchel, C. C., Comer
 Westbrook, R. J., Ila

MERIWETHER COUNTY**Officer**

Sec'y.-Treas.....Gilbert, R. B.

Members

Allen, W. P., Woodbury
 Bennett, V. H., Gay
 Dixon, J. L., Woodbury
 Ellis, W. P., Gay
 Gilbert, R. B., Greenville
 Johnson, J. A., Manchester
 Witt, M. S., Manchester

MITCHELL COUNTY**Officer**

Secretary.....Stevens, A. T.

Members

Belcher, D. P., Pelham
 Brown, J. L., Camilla
 Clements, J. R., Pelham
 Cranford, O. G., Sale City
 Lewis, F. L., Camilla
 Luke, D. P., Camilla
 Reid, C. W., Pelham
 Roles, C. L., Camilla
 Stevens, A. T., Sale City
 Stevenson, C. A., Camilla
 Summerlin, J. A., Pelham
 Williams, B., Pelham

MONROE COUNTY**Officers**

President.....Smith, B. L.
 Vice-President.....Goolsby, R. C.
 Sec'y.-Treas.....Smith, W. J.

Members

Alexander, G. H., Forsyth
 Clodfelter, Thos. C., Forsyth
 Elrod, J. O., Forsyth
 Goolsby, R. C., Sr., Forsyth
 Smith, B. L., Forsyth, R. 1
 Smith, W. J., Juliette

MONTGOMERY COUNTY**Officers**

President.....Sharpe, H. C.
 Vice-President.....Dees, J. H.
 Sec'y.-Treas.....Hunt, J. E.
 Delegate.....Moses, W. M.

Members

Dees, J. H., Alston
 Hunt, J. E., Mt. Vernon
 Moses, W. M., Uvalda
 Palmer, J. W., Ailey
 Sharpe, H. C., Uvalda

MORGAN COUNTY**Officers**

President.....Fambrough, W. M.
 Vice-President.....McGeary, W. C.
 Sec'y.-Treas.....Carter, Dan M.

Delegate.....Porter, J. L.

Members

Carter, Dan M., Madison
 Fambrough, W. M., Bostwick
 McGeary, W. C., Madison
 Porter, J. L., Rutledge

MURRAY COUNTY**Officer**

Sec'y.-Treas.....Bradford, J. E.

Members

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 Bradford, J. E., Spring Place
 Bradley, R. H., Chatsworth
 Dickie, E. H., Chatsworth
 Jones, F. M., Chatsworth (Hon.)
 Kemp, R. C., Conasauga, Tenn.

MUSCOGEE COUNTY**Officer**

Sec'y.-Treas.....Gilliam, O. D.

Members

Anderson, J. M., Murrah Bldg., Columbus (Hon.)
 Baird, J. M., Swift Bldg., Columbus
 Baker, E. L., Masonic Temple, Columbus
 Blanchard, Mercer, Swift Bldg., Columbus.
 Blackmar, Francis B., Woolworth Bldg., Columbus
 Brannen, O. C., Murrah Bldg., Columbus
 Brooks, H. W., Doctors Bldg., Columbus
 Brooks, R. L., Doctors Bldg., Columbus
 Campbell, W. H., 1036 Third Ave., Columbus
 Carter, C. B., Murrah Bldg., Columbus
 Cooke, W. L., Doctors Bldg., Columbus
 Dexter, C. A., Murrah Bldg., Columbus
 Dillard, Guy J., Murrah Bldg., Columbus
 Dykes, A. N., Swift Bldg., Columbus
 Floyd, C. F., Columbus
 Gilliam, O. D., Doctors Bldg., Columbus
 Johnson, C. D., 19½ Twelfth Street, Columbus
 Johnson, J. H., Murrah Bldg., Columbus
 Johnson, R. F., Swift Bldg., Columbus
 Jordan, W. P., Doctors Bldg., Columbus
 McDuffie, J. H., Jr., Masonic Temple, Columbus
 McDuffie, J. H., Sr., Masonic Temple, Columbus
 Moses, Alice, P. O., Box 863, Columbus
 Murray, G. S., Murrah Bldg., Columbus
 Norman, Frank P., Murrah Bldg., Columbus
 Peacock, C. A., Murrah Bldg., Columbus
 Pennington, J. H., Doctors Bldg., Columbus
 Schley, Francis B., Swift Bldg., Columbus
 Thompson, J. B., Swift Bldg., Columbus
 Thrash, J. A., Doctors Bldg., Columbus

Williams, R. L., Doctors Bldg., Columbus
 Willis, J. N., Swift Bldg., Columbus
 Winn, J. H., Swift Bldg., Columbus
 Wooldridge, J. C., Murrah Bldg., Columbus
 Young, S. E., Midland
 Youmans, J. R., 1140½ Broad St., Columbus

McDUFFIE COUNTY**Member**

Boland, S. A., Thomson

NEWTON COUNTY**Officer**

Sec'y.-Treas.....Travis, W. D.

Members

Lovlace, J. C., Porterdale
 Pharr, L. J., Conyers
 Randle, J. H., Covington, Rt. 8
 Sams, J. R., Covington, Rt. 8
 Travis, W. D., Covington
 Waites, S. L., Covington
 Wilson, Pleas, Newborn

**OCMULGEE SOCIETY
(Bleckley, Dodge, Pulaski)****Officers**

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 Vice-President.....Smith, E. L.
 Sec'y.-Treas.....Bush, A. R.
 Delegate.....Bush, A. R.

Members

Brown, E. C., Hawkinsville
 Bush, Albert R., Hawkinsville
 Coleman, W. A., Eastman
 Massey, W. F., Chester
 Parramore, W. V., Cochran
 Parkerson, I. J., Eastman
 Pirkle, W. H., Cochran
 Smith, A. L., Cochran
 Smith, Ernest L., Eastman
 Smith, J. M., Cochran
 Wall, J. C., Eastman
 Whipple, R. L., Cochran
 Yawn, B. W., Eastman

PICKENS COUNTY**Officer**

Sec'y.-Treas.....Atherton, H. G.

Members

Atherton, H. G., Jasper
 Russell, C. C., Jasper

PIKE COUNTY**Officer**

Sec'y.-Treas.....Hcad, M. M.

Members

Graves, J. R. Zebulon
 Grubbs, J. H., Molena
 Head, D. L., Zebulon
 Head, J. M., Zebulon (Hon.)
 Head, M. M., Zebulon
 Howard, I. B., Williamson
 Mallory, R. A., Concord

POLK COUNTY**Officers**

President.....Peek, C. W.
 Vice-President.....England, W. G.
 Sec'y.-Treas.....Chaudron, P. O.
 Delegate.....England, W. G.

Members

Chaudron, P. O., Cedartown

Cooper, J. J., Cedartown
 England, W. G., Cedartown
 Goldin, Ivy T., Cedartown
 Good, Jno. W., Cedartown
 McBryde, T. E., Rockmart
 Peek, C. W., Cedartown
 Pennington, J. E., Esom Hill
 Whitely, S. L., Cedartown
 Williams, D. B., U. S., Veterans' Hos-
 pital, Peachtree Road, Atlanta
 Wood, C. V., Cedartown

PUTNAM COUNTY**Officers**

President.....Taliaferro, V. H.
 Vice-President.....Griffith, E. F.
 Sec'y.-Treas.....Hamrick, H. P.

Members

Griffith, E. F., Eatonton
 Hamrick, H. P., Eatonton
 Taliaferro, V. H., Eatonton

RABUN COUNTY**Officer**

Sec'y.-Treas.....Green, J. A.

Members

Dover, J. C., Clayton
 Green, J. A., Clayton
 Neville, L., Dillard

RANDOLPH COUNTY**Officers**

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 Vice-President.....McCurdy, E. C.
 Sec'y.-Treas.....Moore, G. Y.

Members

Barfield, F. C., Jacksonville, Fla. (Hon.)
 Binion, W. W., Benevolence
 Carter, Geo., Bluffton (Hon.)
 Crittenden, A. L., Shellman
 Crook, W. W., Cuthbert
 Elliott, W. G., Cuthbert
 Gary, Loren, Georgetown
 Harper, T. F., Coleman
 Ingram, H. R., Coleman
 Martin, F. M., Shellman
 Moore, G. Y., Cuthbert
 McCurdy, E. C., Shellman
 Patterson, F. D., Jr., Auburn Ala.,
 (Hon.)
 Patterson, F. D., Cuthbert
 Patterson, J. C., Cuthbert
 Rogers, F. S., Coleman
 Rogers, W. T., Coleman (Hon.) Deceased
 Saurez, Annette, McD., Cuthbert (Hon.)
 Shelly, W. P., Albany (Hon.)
 Shepard, J. L., Carnegie
 Terry, Wm. R., Shellman (Hon.)
 Weathers, A. F., Shellman

RICHMOND COUNTY**Officer**

Sec'y.-Treas.....Phinzy, Irvine

Members

Agee, M. P., 753 Broad St., Augusta
 Akerman, J. C., 831 Fifteenth St., Au-
 gusta
 Baines, M. Carroll, U. S. Veterans'
 Hospital, Bronx, New York, N. Y.
 Baker, H. J., Southern Finance Bldg.,
 Augusta
 Battey, Calden, R., Sou. Finance Bldg.,
 Augusta
 Battey, W. W., Jr., 428 Sixth St., Au-
 gusta

Beddingfield, W. R., Southern Finance
 Bldg., Augusta
 Beeler, Courtland, Edgefield, S. C.
 Bernard, G. T., 203 Thirteenth St., Au-
 gusta
 Blanchard, C. A., 926 Broad St., Au-
 gusta
 Blanchard, P. G., Appling
 Brown, T. P., Marion Bldg., Augusta
 Bryans, C. I., Sou. F. Bldg., Augusta
 Bryant, V. L., Bartow
 Bryson, R. I., Southern Finance Bldg.,
 Augusta
 Burdshaw, J. F., 724 Monte Sano Ave.,
 Augusta
 Burpee, C. M., St., Louis Children's
 Hospital, St. Louis, Mo.
 Butler, J. H., Sou. Finance Bldg., Au-
 gusta
 Chaney, Ralph H., Medical College,
 Augusta
 Clayton, Malcolm D., 811 Metcalf St.,
 Augusta
 Crane, C. W., 1345 Greene St., Augusta
 Cranston, W. J., Sou. Finance Bldg.,
 Augusta
 Davidson, A. A., 1116 Greene St., Au-
 gusta
 Eaton, Paul, Medical College, Augusta
 Eve, H. J., 619 Greene St., Augusta
 Goodrich, W. H., Southern Finance
 Bldg., Augusta
 Gray, J. D., 1345 Greene St., Augusta
 Harison, W. H., 122 Jackson St., Au-
 gusta
 Harrell, H. P., Southern Finance Bldg.,
 Augusta
 Harris, R. L., U. S. Veterans' Hospital
 Augusta
 Holmes, L. P., University Hospital,
 Augusta
 Horne, G. T., Sou. Finance Bldg., Au-
 gusta
 Houston, W. R., Margaret Wright
 Hospital, Augusta
 Hull, Asbury, Sou. Finance Bldg., Au-
 gusta
 Hull, J. M., 753 Broad St., Augusta
 Huson, W. Joseph, Sou. Finance Bldg.,
 Augusta
 Jennings, W. D., 753 Broad St., Au-
 gusta
 Kelley, G. Lombard, Medical College,
 Augusta
 Kelley, J. O., Avera
 Kellogg, W. C., Southern Finance
 Bldg., Augusta
 Kershaw, Theo., Sou. Finance Bldg.,
 Augusta
 Ketchins, S. C., Louisville
 Kilpatrick, A. J., 704 Greene St., Au-
 gusta
 Lamar, R. V., Medical College, Augusta
 Lee, F. Lansing, Sou. Finance Bldg.,
 Augusta
 Lentz, C. S., University Hospital, Au-
 gusta
 Levy, M. S., Sou. Finance Bldg., Au-
 gusta
 Lewis, J. R., Louisville
 Lewis, S. J., Southern Finance Bldg.,
 Augusta
 Lichtenstein, S., U. S. Veterans' Hos-
 pital, Augusta
 May, E. R., Lincolnton

Mealing, H. G., Martintown Road, R.
 F. D., Augusta
 Metts, J. C., Sacred Heart Sanitarium,
 Milwaukee, Wisconsin
 Michel, H. M., Southern Finance Bldg.,
 Augusta
 Milligan, K. W., 942 Greene St., Au-
 gusta
 Montgomery, C. J., 918 Johns Road, Au-
 gusta (Deceased)
 Mountain, G. W., 2612 Walton Way,
 Augusta
 Mulherin, F. X., Southern Finance
 Bldg., Augusta
 Mulherin, W. A., Southern Finance
 Bldg., Augusta
 Murphey, E. E., 432 Telfair St., Au-
 gusta
 Oden, Jno. W., Gracewood
 Oertel, T. E., Southern Finance Bldg.,
 Augusta
 Olyphant, Jones B., Mitchell
 Page, Hugh N., 1345 Greene St., Au-
 gusta
 Phinzy, Irvine, Southern Finance Bldg.,
 Augusta
 Price, W. T., Montgomery Bldg., Au-
 gusta
 Pund, Edgar R., Medical College, Au-
 gusta
 Revell, S. T. R., Louisville
 Rhodes, R. L., Sou. Finance Bldg., Au-
 gusta
 Roberts, W. H., 828 Greene St., Au-
 gusta
 Robertson, J. Righton, 753 Broad St.,
 Augusta
 Salley, O. B., 1962 McDowell St., Au-
 gusta
 Sasser, Thos. J., City Health Depart-
 ment, East Fourth St., Charlotte,
 N. C.
 Scharnitzky, E. O., Sou. Finance Bldg.,
 Augusta
 Shaw, H. W., Sou. Finance Bldg., Au-
 gusta
 Sherman, Jno. H., 1122 Johns Road,
 Augusta
 Silver, D. M., Sou. Finance Bldg., Au-
 gusta
 Soper, R. W., U. S. Veterans' Hospital
 Augusta (Asso.)
 Sydenstricker, V. P., University Hos-
 pital, Augusta
 Tessier, L. P., Masonic Bldg., Augusta
 Thurmond, J. W., University Hospital
 Augusta
 Timmons, C. C., Marion Bldg., Au-
 gusta
 Traylor, Geo. A., Southern Finance
 Bldg., Augusta
 Walker, Louis M., U. S. Veterans'
 Hospital, Augusta, Associate
 Walton, C. R., U. S. Veterans' Hos-
 pital, Augusta
 Ward, Chas. D., Southern Finance
 Bldg., Augusta
 Weeks, J. L., Harlem
 Wilcox, E. A., 921 Greene St., Augusta
 Wright, Geo. W., Raleigh, N. C.
 Wright, J. C., Southern Finance Bldg.,
 Augusta
 Wright, Lewis H., 638 Greene St., Au-
 gusta
 Wright, P. B., Sou. Finance Bldg., Au-
 gusta

SCREVEN COUNTY**Officers**

President.....Lanier, L. F.
 Vice-President.....Lovett, W. R.
 Sec'y.-Treas.....Evans, W. W.
 Delegate.....Reddick, A. B.

Members

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 Doster, H. W., Rocky Ford
 Downing, E. E., Newington
 Evans, W. W., 527 Forrest Ave., North
 Chattanooga, Tenn.
 Ezell, H. E., Oliver
 Lanier, L. F., Sylvania
 Lovett, W. R., Sylvania
 Mims, S. W., Sylvania
 Powell, J. W., Sylvania
 Reddick, A. B., Sylvania

SPALDING COUNTY**Officers**

President.....Hawkins, T. I.
 Vice-President.....Griffith, C. F.
 Sec'y.-Treas.....Copeland, H. J.
 Delegate.....Miles, W. C.

Members

Anthony, E. R., Griffin (Hon.)
 Anthony, J. R., Griffin
 Austin, W. H., Griffin
 Conn, Webb, Griffin
 Copeland, H. J., Griffin
 Copeland, H. W., Griffin
 Crowder, M. S., Griffin
 Drewery, T. E., Griffin
 Forrer, D. A., Griffin
 Frye, A. H., Griffin
 Griffith, C. F., Griffin
 Hawkins, T. I., Griffin
 Huckaby, A. H., Griffin
 Humphries, W. C., Griffin
 Hunt, K. S., Griffin
 Miles, W. C., Griffin
 Snow, Harmon, Experiment
 Steele, W. H., Griffin
 Tucker, C. L., Griffin
 Wood, J. B., Griffin

STEPHENS COUNTY**Officers**

President.....Chaffin, E. F.
 Vice-President.....Swain, W. H.
 Sec'y.-Treas.....Ayers, C. L.
 Delegate.....Terrell, J. H.

Members

Ayers, C. L., Toccoa
 Chaffin, E. F., Toccoa
 Craig, Alexander, Toccoa
 Davis, Jeff, Toccoa
 Edge, J. H., Toccoa
 Isbell, J. E. D., Toccoa
 Swain, W. H., Martin
 Terrell, J. H., Toccoa

STEWART-WEBSTER COUNTIES**Officers**

President.....Grier, R. L.
 Vice-President.....Pickett, C. E.
 Sec'y.-Treas.....Kenyon, J. M.
 Delegate.....Kenyon, J. M.

Members

Alston, N. C., Richland (Hon.)
 Foster, J. H., Preston
 Grier, R. L., Lumpkin
 Kenyon, J. M., Richland
 Lovvorn, R. M., Richland

Lunsford, J. F., Preston
 Lynch, C. S., Lumpkin
 McCurdy, W. F., Richland
 Miller, T. B., Omaha (Hon.)
 Pickett, C. E., Richland
 Sims, W. C., Richland

SUMTER COUNTY**Officers**

President.....Smith, Herschel A.
 Vice-President.....Logan, J. C.
 Sec'y.-Treas.....Smith, Henry A.
 Delegate.....Wise, B. T.

Members

Anderson, E. B., Americus
 Boggs, H. L., Cobb
 Bridges, B. L., Ellaville
 Cain, Sylvester, Plains
 Chambliss, J. W., Americus
 Houston, W. H., Americus
 Jordan, J. R., Ellaville
 Logan, J. C., Plains
 Lunsford, J. F., Preston
 Pendergrass, R. C., Americus
 Prather, W. S., Americus
 Primrose, A. C., Americus
 Smith, Henry A., Americus
 Smith, Herschel A., Americus
 Stukes, J. T., Americus
 Tolleson, H. M., Smithville
 Ware, Ford, Americus
 Wise, B. J., Plains
 Wise, B. T., Plains
 Wise, S. P., Plains
 Wood, Kenneth, Leslie

TALBOT COUNTY**Officers**

President.....Peeler, J. E.
 Vice-President.....Leonard, W. P.
 Sec'y.-Treas.....Carson, C. C.
 Delegate.....Carter, G. L.

Members

Carson, C. C., Talbotton
 Carter, G. L., Talbotton
 Leonard, W. P., Talbotton
 Peeler, J. E., Woodland

TALIAFERRO COUNTY**Officers**

President.....Rhodes, J. A.
 Sec'y.-Treas.....Nash, T. C.

Members

Davidson, A. C., Sharon (Hon.)
 Nash, T. C., Philomath
 Ray, A. T., Sharon
 Rhodes, John A., Crawfordville

TATTNALL COUNTY**Officers**

President.....Bowen, Jno. H.
 Sec'y.-Treas.....Collins, J. C.

Members

Bowen, Jno. H., Cobbtown
 Collins, J. C., Collins
 Hughes, J. M., Glennville
 Jones, R. D., Elza
 Kennedy, J. J., Collins
 Strickland, L. V., Cobbtown
 Tootle, G. W., Glennville
 Walling, C. B., Collins

TAYLOR COUNTY**Officers**

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 Sec'y.-Treas.....Hind, J. C.

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 Edwards, W. W., Butler
 Hind, J. C., Reynolds
 Montgomery, R. C., Butler

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 Sec'y.-Treas.....Maloy, C. J.
 Delegate.....McMillan, T. J.

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 Fussell, J. K., Rhine, R. F. D.
 Fussell, T. D., Rhine, R. F. D.
 Harrell, A. O., Milan
 Jones, A. J., Jacksonville
 Kennon, B. M., McRae
 Maloy, C. J., Helena
 Maloy, D. W. F., Milan
 Mann, Frank, McRae
 McMillan, Thos. J., Milan
 Napier, LeRoy, Lumber City
 Neal, J. W., Scotland
 Powell, W. H., Lumber City

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 Vice-President.....Cranford, J. R.
 Sec'y.-Treas.....Thomas, Logan
 Delegate.....Kenyon, S. P.

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 Bowman, R. E., Bronwood
 Chappell, Guy, Dawson
 Cranford, J. R., Sasser
 Dean, J. G., Dawson
 Durham, Wm. P., Sasser
 Holt, R. R., Montezuma
 Kenyon, S. P., Dawson
 Lamar, Lucius, Dawson
 Lewis, J. H., Dawson
 Patterson, J. W., Dawson
 Thomas, Logan, Dawson

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 Vice-President.....Andrews, Agnew
 Sec'y.-Treas.....Wall, C. K.

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 Andrews, Agnew, Thomasville
 Austin, G. L., Pavo
 Bell, R. F., Boston
 Bevans, J. L., Archbold Memorial Hos-
 pital, Thomasville (Hon.)
 Cheshire, S. L., Thomasville
 Chestnutt, T. H., Coolidge
 Erickson, Mary J., Thomasville
 Ferguson, C. H., Thomasville
 Garrett, J. A., Meigs
 Glover, G. B., Monticello, Fla. (Hon.)
 Hill, Roy A., Thomasville
 Isler, J. N., Meigs
 Jarrell, W. W., Thomasville
 Jones, H., Coolidge
 King, J. M., Metcalf

King, J. T., Thomasville
 Little, A. D., Thomasville
 Lundy, L. L., Boston
 Moore, H. M., Thomasville
 Palmer, J. B., Thomasville
 Pitman, James F., Thomasville
 Reid, James W., Thomasville
 Reilley, C. J., Thomasville
 Sanchez, S. E., Barwick
 Vann, H. A., Boston (Hon.)
 Wahl, Ernest, Thomasville
 Wall, C. K., Thomasville
 Wall, H. A., Ochlocknee
 Wallace, J. W., Thomasville
 Watkins, W. B., Metcali
 Watt, C. H., Thomasville
 Williams, J. F., Monticello, Fla. (Hon.)
 Winchester, M. E., Thomasville

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 Delegate.....Pickett, F. B.

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 Hendricks, W. H., Tifton
 Julian, G. W., Tifton (Deceased)
 Pittman, Carl S., Tifton
 Pickett, F. B., Ty Ty
 Price, J. M., Tifton
 Tyson, W. E., Chula

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 Aiken, W. W., Lyons
 Alexander, G. T., Vidalia
 Camp, J. A., Ochoopee
 Currie, M. L., Vidalia
 Findley, C. W., Vidalia
 Hall, J. K., Lyons
 Mercer, J. E., Vidalia
 Odom, W. W., Lyons
 Youmans, H. D., Lyons

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 Delegate.....Lanier, L. I.

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 Lanier, L. I. Soperton
 Moye, O. B., Soperton

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Officer

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 Beard, J. S., Edison
 Calhoun, W. W., Arlington
 Cheshire, J. L., Damascus
 Fitzgerald, P. H., Blakely (Deceased)
 Griffin, P. E., Edison
 Gunter, G. O., Newton
 Hattaway, J. C., Edison
 Hays, W. C., Colquitt
 Hendry, J. H., Bainbridge

Holland, S. P., Blakely
 Roberts, C. A., Leary
 Sharp, C. K., Arlington
 Sharp, C. M., Cincinnati General Hos-
 pital, Cincinnati, Ohio
 Shepard, W. O., Bluffton
 Simmons, B. K., Blakely
 Smith, E. C., Donalsonville
 Standifer, J. G., Blakely
 Standifer, W. B., Blakely
 Tatum, W. J., Ft. Gaines
 Twitty, C. W., Elmodel
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TRI SOCIETY

(Liberty, Long, McIntosh)

Officer

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 Baggs, D. W., Ludowici
 Gibson, B. H., Allenhurst
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 Delegate.....Clark, W. H.

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 Bartee, L. H., West Point
 Brock, B. H., Hogansville
 Callaway, Enoch, LaGrange
 Clark, W. H., LaGrange
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 Grant, N. L., LaGrange
 Hadaway, W. H., LaGrange
 Hammett, H. H., LaGrange
 Harvey, C. W., Hogansville
 Herman, E. C., LaGrange
 Lane, I. H., LaGrange
 Lane, J. E., LaGrange
 Lee, R. O., LaGrange
 Morgan, D. E., LaGrange
 McCall, W. R., LaGrange
 McCrummer, L. R., LaGrange
 McCulloh, Hugh, Jr., West Point
 McCulloh, H., West Point
 O'Neal, Rance, West Point
 O'Neal, R. S., LaGrange
 Parham, LeRoy, Chipley
 Park, E. R., LaGrange
 Phillips, W. P., LaGrange
 Poer, J. M., West Point
 Ridley, F. M., LaGrange
 Rutland, S. C., LaGrange
 Rutland, W. W., LaGrange
 Slack, H. R., LaGrange
 Taylor, J. C., LaGrange
 Vineyard, T. L., LaGrange
 Williams, C. O., West Point
 Williams, Virgil, Cantville

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 Belflower, H. M., Sycamore
 Rawlins, R. D., Rebecca
 Rogers, F. W., Ashburn

Story, W. L., Ashburn
 Turner, W. J., Ashburn

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 Slappy, J. G., Jeffersonville
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 Delegate.....Adams, B. C.

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 Barron, H. A., Thomaston
 Bridges, B. L., Thomaston
 Carter, E. W., Thomaston (Deceased)
 Carter, R. L., Thomaston
 Harris, C. A., The Rock
 McKenzie, J. M., Thomaston
 Peacock, T. G., Thomaston
 Pritchett, D. W., Thomaston
 Verdier, R. A., Hodges-Neal Bldg.,
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 Wilson, Samuel, Yatesville
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WALKER COUNTY**Officers**

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 Sec'y.-Treas.....Hammond, J. H.

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 Gardner, J. L., Sulphur Springs
 Hale, B. C., Rossville
 Hammond, D. W., LaFayette
 Hammond, J. H., LaFayette
 Murphy, M. W., Ringgold
 Rogers, W. D., Pittsburg
 Shields, H. F., Chickamauga
 Shields, J. A., LaFayette
 Spearman, M. W., Chickamauga
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 Bussell, B. R., Waycross
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 Carswell, H. J., Waycross
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 Dorminy, A. C., Hoboken
 Fleming, A., Folkston
 Folks, W. M., Waycross
 Hafford, W. C., Waycross
 Hawkins, L. M., Blackshear
 Hendry, G. T., Blackshear
 Hollingsworth, P. L., A. C. L. Hospital,
 Waycross
 Huey, H. G., Homerville
 Johnson, R. L., Waycross
 Lane, B. B., A. C. L. Hospital, Way-
 cross
 Latimer, J. H., Waycross
 McCoy, W. R., Folkston
 McCullough, K., Waycross
 Minchew, B. H., Waycross
 Mixson, W. D., Waycross
 Penland, J. E., Waycross
 Reavis, W. F., Waycross
 Stephens, C. M., Waycross
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 Walker, R. C., Waycross
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 Sec'y.-Treas.....McGahee, R. C.

Members

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 McGahee, Robt. C., Warrenton

Ricketson, F. B., Warrenton
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 Delegate.....Peacock, E. S.

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 Harbin, F. P., Oconee
 Harris, E. A., Sandersville (Deceased)
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 Lozier, N. H., Sandersville
 Malone, Steve B., Sandersville
 McMaster, D. E., Tennille
 Mitchell, L. C., Sandersville
 Newsom, N. J., Sandersville
 Overby, N., Sandersville
 Peacock, E. S., Harrison
 Rawlings, F. B., Sandersville
 Rogers, O. L., Sandersville
 Taylor, Ralph L., Davisboro
 Vickers, T. E., Wrightsville
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 Vice-President.....Ogden, I. K.
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Members

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 Kennedy, B. L., Dalton
 Lacewell, J. F., Dalton (Hon.)
 McAfee, J. G., Dalton
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 Shellhorse, E. O., Dalton
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 Simpson, A. W., Washington
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 Wills, C. E., Washington
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WORTH COUNTY**Officers**

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 Ford, E. D., Doles
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 Sessions, W. W., Summer
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 Tipton, W. C., Sylvester
 Tracy, J. L., Sylvester

END-RESULTS OF EXTRA-ARTICULAR FIXA- TION OF TUBERCULOSIS HIP IN CHILDREN

F. C. Kidner, Detroit (Journal A. M. A., Decem-
 ber 15, 1928), says that assuming that tuberculosis
 of the hip does not heal without fixation, operative
 fixation should be done as early as possible, as regards
 both the age of the patient and the duration of the
 disease. Extra-articular operation provides a means for
 early fixation. The juxta-articular methods of Kappis
 and Hibbs, and the free graft described by Kidner pro-
 vide a better means than the para-articular method of
 Albee, Calve and others. It is safe to operate in the
 presence of active tuberculous disease, even with abs-
 cess, if there is no open sinus. Even though fixa-
 tion does not occur promptly after the operation, the
 graft provides an internal splint which relieves symp-
 toms and prevents spread of the disease. The opera-
 tion in no way interferes with growth. Shortening
 following the operation is only that present before the
 operation. If the growth center has been destroyed
 before operation, relative shortening will increase after
 operation. If not, the limb will keep up with its

mate. Flexion of from 20 to 40 degrees in midposi-
 tion is the position of choice for these fixed hips. The
 earlier the operation is done in proved tuberculosis of
 the hip, the less will be the shortening and the short-
 er the period of invalidism.

VALUE OF ACTIVE IMMUNIZATION AGAINST SCARLET FEVER

Guy L. Kiefer, Lansing, Mich. (Journal A. M. A.,
 December 15, 1928), discusses the value of active
 immunization against scarlet fever with examples of
 the experimental work carried on in schools and other
 institutions in Michigan. He presents the following
 problems for future investigation: (1) The toxin for
 skin testing must be held uniform and every effort
 should be made to develop methods of preparation and
 standardization so that we may be assured of a stand-
 ard skin test dose. (2) The duration of immunity in
 relation to the amount of toxin given should be stud-
 ied more carefully over a longer time. (3) Poly-
 valent toxins and antitoxins should be investigated
 more extensively.

